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QUEEN'S UNIVERSITY
AT KINGSTON

KINGSTON ONTARIO CANADA

Queen's University

KINGSTON, CANADA



INCORPORATED BY ROYAL CHARTER IN 1841

CALENDAR

OF

THE FACULTY OF ARTS

NINETY-SECOND SESSION

1932-33

SPECIAL NOTICE FOR THE SESSION 1932-33

Greek and Roman Civilization is withdrawn as an option for Philosophy 1.

Preparatory courses will not hereafter be offered in Latin, French, and Mathematics.

The new Honours Courses are in tentative form. The University reserves the right to make changes for the session 1932-33. During the summer a special pamphlet will be issued giving time table, details of courses, and other information.

**Queen's University
Library**

KINGSTON, ONTARIO

Queen's University

KINGSTON, CANADA



INCORPORATED BY ROYAL CHARTER IN 1841

CALENDAR OF THE FACULTY OF ARTS

NINETY-SECOND SESSION
1932-33

PRINTED FOR THE UNIVERSITY BY THE JACKSON PRESS
KINGSTON
1932



BUILDINGS OF QUEEN'S UNIVERSITY

PLAN OF QUEEN'S UNIVERSITY GROUNDS

- | | | |
|-----------------------------|----------------------------|---|
| 1. Central Heating Plant. | 11. Carruther's Hall. | 21. Richardson Stadium. |
| 2. Commerce Building. | 12. Fleming Hall. | 22. Leonard Field. |
| 3. Observatory. | 13. Storehouse. | 23. Kingston General Hospital
and Richardson Laboratory. |
| 4. Ban Righ Hall. | 14. Mechanical Laboratory. | 24. Miller Hall. |
| 5. Old Arts Building. | 15. Nicol Hall. | 25. Gymnasium. |
| 6. Principal's Residence. | 16. Gordon Hall. | 26. Students' Memorial Union. |
| 7. Old Medical Building. | 17. Douglas Library. | 27. Gordon House. |
| 8. Hydraulics Laboratory. | 18. Ontario Hall. | 28. Goodwin House. |
| 9. Pathological Laboratory. | 19. Grant Hall. | 29. Macdonnell House. |
| 10. Jock Harty Arena. | 20. Kingston Hall. | |

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THE ACADEMIC YEAR*

THE NINETY-SECOND SESSION of the University will begin on Wednesday, September 28th, 1932, at 8 a.m. Convocation will be held on Wednesday, May 10, 1933.

1932

- May 1*—Written notice due at the Registrar's Office of candidates' intention to compete for Matriculation Scholarships.
- July 4*—Registration for Summer School. A fee of \$3 will be charged to those registering later than the afternoon of the 4th, with additional fees, if any registrations are accepted, after the 6th.
- July 5*—Summer School opens at 8 a.m.
- July 15*—Last day for receiving applications, accompanied by fee, for September examinations, or degrees, from intra-mural and extra-mural students.
- Aug. 19*—Summer School closes at 5 p.m.
- Sept. 1*—Arts Supplemental examinations begin.
- Sept. 10*—Last day of registration for extra-mural students without extra fee.
- Sept. 17*—Last day of registration for extra-mural students with extra fee.
- Sept. 26*—Registration in Arts begins at 2 p.m. for students who are registering for the first time.†
- Sept. 27*—Last day for registration of students registering for the first time.
- Sept. 28*—Registration of intra-mural students who have been registered in previous sessions (one day only).†
- Sept. 29*—Classes open in Arts at 8 a.m.

*The term "Academic Year" used in connection with Regulations and Courses of Study refers to the period extending from October 1 to September 30.

‡Every student registering for the first time must submit a certificate of vaccination.

†The fee for late registration is \$3 on September 24⁹, with an additional fee of \$1 for each day after that date up to October 8.

- Oct. 8*—Last day of registration for intra-mural students who have not previously obtained from the Faculty permission to register later.
- Oct. 31*—Last day upon which applications for Rhodes Scholarships will be received by the Secretary of the Committee of Selections for the Province.
- Nov. 1*—Last day for receiving applications, accompanied by fee, from extra-mural students for December examinations.
- Dec. 1*—First day upon which extra-mural students may transfer to intra-mural classes.
- Dec. 15*—Mid-year examinations begin.
- Dec. 21*—Last day for receiving applications for the Robert Bruce Bursary.
- Dec. 22*—Christmas holidays begin at 5 p.m.

1933

- Jan. 4*—Classes re-open at 8 a.m.
- Jan. 15*—Last day for receiving applications from candidates for the M. C. Cameron Scholarship in Gaelic.
- Feb. 15*—Last day for receiving applications and fees from extra-mural students for the April examinations, and for degrees.
- Mar. 15*—Last day for receiving applications and fees for degrees from intra-mural students.
- April 1*—Last day for receiving manuscripts for University Prizes, applications for Arts Research Scholarships and theses for degree.
- April 7*—Class-work closes at 5 p.m.
- April 10*—Last day for extra-mural students to add classes for the Summer Session without extra fee.
- April 11*—Examinations begin.
- April 14*—Good Friday.
- April 17*—Last day for extra-mural students to add classes for the Summer Session with extra fee.
- May 5*—Statutory meeting of the Senate for awarding Standing, Medals, Honours, and Degrees.
- May 10*—Convocation for conferring Degrees, announcing Honours, and distributing Prizes and Medals.

CALENDAR
1932

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	..	1	2	..	1	2	3	4	5	6	..	..	1	2	3	4	5	..	..	..	..	..	1	2
3	4	5	6	7	8	9	7	8	9	10	11	12	13	6	7	8	9	10	11	12	3	4	5	6	7	8	9
10	11	12	13	14	15	16	14	15	16	17	18	19	20	13	14	15	16	17	18	19	10	11	12	13	14	15	16
17	18	19	20	21	22	23	21	22	23	24	25	26	27	20	21	22	23	24	25	26	17	18	19	20	21	22	23
24	25	26	27	28	29	30	28	29	....	....	....	....	....	27	28	29	30	31	....	....	24	25	26	27	28	29	30
31	..	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

MAY							JUNE							JULY							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	..	..	..	1	2	3	4	..	..	..	..	1	2	..	1	2	3	4	5	6	7
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27
29	30	31	....	....	....	....	26	27	28	29	30	..	..	24	25	26	27	28	29	30	28	29	30	31	..	..	..
....	....	....	....	....	....	....	....	....	....	....	....	....	....	31	..	..	..	..	..	..	....	....	....	....	....	....	....

SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	1	2	3	..	..	..	..	..	1	..	..	1	2	3	4	5	..	..	..	..	1	2	3	4
4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10
11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17
18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26	18	19	20	21	22	23	24
25	26	27	28	29	30	....	23	24	25	26	27	28	29	27	28	29	30	..	..	..	25	26	27	28	29	30	31
....	....	....	....	....	....	....	30	31	..	..	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....

1933

[illegible]

HISTORY OF THE UNIVERSITY

Queen's University owes its origin to the desire of the Synod of the Presbyterian Church in Canada, in connection with the Church of Scotland, for a ministry trained within the country. As early as 1832 the Provincial Government had been petitioned "to endow without delay an institution, or professorships, for the education and training of young men for the ministry in connection with the Synod." This and other representations failing of their object, steps were taken by the Synod to found a college at Kingston on the lines of the Scottish National Universities. On October 16, 1841, a Royal Charter was issued by Her Majesty Queen Victoria for the establishment of Queen's College, Kingston, and the first classes were opened in March, 1842, with the Rev. Dr. Liddell as Principal. Funds were provided in part by grants from the Presbyterian Church in Scotland and from the Canadian Government, and in part by liberal subscriptions from the friends of the young and growing University. In 1867-68, however, the withdrawal of the Provincial grant, and the failure of the Commercial Bank, almost brought financial disaster. But the crisis was met by the determination of Principal Snodgrass and of other self-denying workers, chief among whom was Professor Mackerras. The country was canvassed for subscriptions, and as a result of the widespread interest aroused, \$113,000 was added to the endowment.

In 1877 Principal Snodgrass was succeeded by the Rev. G. M. Grant, who for a quarter of a century built with brilliant success upon the foundation laid by his predecessors. Under him the University gained rapidly in size and prestige. By 1881 Queen's had a new building, an enlarged staff, and a great increase of students. In 1887, as the result of an effort in commemoration of the Queen's Jubilee, \$250,000 was raised, resulting in further extension, and in the establishment of new professorships.

Principal Grant died in 1902, and was succeeded in the following year by the Very Rev. D. M. Gordon. In 1916, owing to ill-health, Principal Gordon resigned his position, but continued in office until the autumn of 1917, when Rev. R. Bruce Taylor, M.A., D.D., LL.D., was appointed as his successor. In 1930 Principal Taylor resigned his position to live abroad and Dr. J. C. Connell was appointed Acting Principal. He held this position for four months, until October, when W. Hamilton Fyfe, Head of Christ Hospital, England, was installed as Principal of the University.

In 1854 the Medical Faculty of Queen's was established. It was re-organized in 1865 as the Royal College of Physicians and Surgeons

in affiliation with the University, but in 1891 the original status was resumed. Excellent facilities for clinical work are provided in the General Hospital, Hotel Dieu, Ontario Hospital.

Queen's led the way in co-education. As early as 1870 special classes in English and other subjects were formed for women, but Courses leading to a degree were not thrown open to them until 1878-79. In 1880 co-education was extended to the medical course, and in 1883 a separate Women's Medical College was opened and affiliated with Queen's. It was closed, however, in 1894, as similar facilities were offered in Toronto and elsewhere.

The School of Mining was founded in 1893 under an Ontario Charter. For several sessions all its departments were housed in Carruthers Science Hall, which had been erected in 1891, but in view of the rapid growth of the School the Provincial Legislature in 1900 provided for its accommodation two large buildings, Ontario Hall for the Departments of Physics, Geology and Mineralogy and Fleming Hall for the Departments of Civil, Mechanical, and Electrical Engineering. More recently the Provincial Government erected Gordon Hall, which is entirely used for the teaching of Chemistry, and, through the generosity of Professor Nicol and other graduates, Nicol Hall has been built to provide classrooms and laboratories for the Department of Mining and Metallurgy. The School of Mining, which since 1893 had been under the control of a separate Board, was in 1916 amalgamated with the University, and now constitutes its Faculty of Applied Science.

In 1907 the Ontario Government established at Queen's a Faculty of Education for the purpose of providing professional training for teachers in the secondary schools of the Province. In 1920, however, the work of the Faculty was discontinued because of the decision of the Government to extend the scope of the Normal Schools and to create in Toronto the Ontario College for Teachers.

There is now on the University Campus a stately group of buildings, comprising the Old Arts Building (now the Theological Building); Carruthers Hall (Civil Engineering); Kingston Hall (New Arts), the gift of the city of Kingston; Grant Hall, erected by students, graduates, and friends in honour of Principal Grant; Ontario Hall (Physics, Chemical Engineering); Fleming Hall (Mechanical and Electrical Engineering); Gordon Hall (Chemistry); Nicol Hall (Metallurgy); the Medical Building (Anatomy, Pharmacology and Preventive Medicine); the Medical Laboratories Building; the new Gymnasium; Miller Hall (Geology and Mineralogy), named in memory of the late Dr. W. G. Miller; the Observatory; the Douglas Library, named in memory of Dr. James Douglas, a former chancellor of the University, who contributed \$150,000 to its cost; Ban Righ Hall, the residence for women erected through the efforts of the Alumnae Association, and the Richardson Pathological

Laboratory. The Province of Ontario, besides its generous gifts of Ontario, Fleming, and Gordon Halls, referred to in an earlier paragraph, contributed \$150,000 to the Douglas Library and \$125,000 to the new Central Heating and Power Plant.

Queen's University, though founded by a Church, was dedicated to the nation. As its constituency expanded, its constitution was gradually broadened, until finally in 1912, as the result of an amicable arrangement between the Presbyterian Church and the Trustees of the University, an act was passed by the Dominion Parliament removing the last vestige of denominational control.

The endowment of the University is at present about \$2,250,000, of which about \$900,000 was obtained in 1918-19. To this sum the late Chancellor Dr. Douglas contributed \$500,000 and the Carnegie Corporation \$250,000. In recent years the Province of Ontario has steadily increased its grants, and the annual income of the University, derived from all sources, is now nearly 700,000. The registration of students has grown from 665 in 1900 to over 3,800 in the present session, and Queen's has become nation-wide in its work and influence.

GOVERNMENT AND ADMINISTRATION

The administration of the University is vested in the Board of Trustees, the University Council, the Senate, and the Faculty Boards.

THE BOARD OF TRUSTEES

The Board of Trustees consists of *ex-officio* and elective members. The former are the Chancellor, the Principal, and the Rector. The latter consist of (1) one representative from each affiliated college, (2) representatives as provided for by the Statutes from (a) the University Council, (b) the Benefactors, (c) the Graduates, and (3) members elected by the Board of Trustees.

The functions of the Board of Trustees are to manage the finances, to possess and care for the property, to procure legislation, to appoint instructors and other officers, and in general attend to such external matters as do not relate directly to instruction.

THE UNIVERSITY COUNCIL

The University Council consists of the Chancellor, the Trustees, the members of the Senate, and an equal number of members elected by the Graduates from their own members.

The annual meeting of the Council is held on the Tuesday immediately preceding Convocation.

The Functions of the Council are:

(1) To elect the Chancellor, except when two or more candidates are nominated, in which case the election is by registered graduates.

(2) To elect six trustees, two of whom shall retire annually.

(3) To make by-laws governing the elections of (a) the Rector by the registered students, (b) four trustees by the benefactors, (c) six trustees by the University Council, (d) six trustees by the graduates.

(4) To discuss all questions relating to the University and its welfare.

(5) To make representation of its views to the Senate or the Board of Trustees.

(6) To decide on proposals for affiliation.

(7) To arrange all matters pertaining to (a) its own meetings and business, (b) the meetings and proceedings of Convocation, (c) the installation of the Chancellor, (d) the fees for membership, registration and voting.

THE SENATE

The Senate consists of:

The Principal.

The Vice-Principal.

The Principal of Queen's Theological College.

The Dean of the Faculty of Arts.

The Dean of the Faculty of Applied Science.

Three Professors elected by the Faculty of Arts.

Three Professors elected by the Faculty of Applied Science.

Three Professors elected by the Faculty of Medicine.

Two Professors elected by the Faculty of Queen's Theological College.

The Functions of the Senate are:

(1) To determine all matters of an academic character which concern the University as a whole.

(2) To consider and determine all courses of study leading to a degree, including conditions of Matriculation, on recommendation of the respective Faculty Boards; but the Senate shall not embody any changes without having previously presented these to the Faculty.

(3) To recommend to the Board of Trustees the establishment of any additional Faculty, Department, Chair, or Course of Instruction in the University.

(4) To be the medium of communication between the Alma Mater Society and the Governing Boards.

(5) To determine all regulations regarding the social functions of the students within the University, and regarding the University Library and University Reading Rooms.

(6) To publish the University Calendars.

(7) To conduct Examinations.

(8) To grant Degrees.

(9) To award University Scholarships, Medals, and Prizes.

(10) To enforce the Statutes, Rules, and Ordinances of the University.

(11) And generally to make such recommendations to the Governing Boards as may be deemed expedient for promoting the interests of the University.

THE FACULTY BOARDS

The Faculty Boards are constituted as follows:

For the Faculty of Arts and for the Faculty of Applied Science the Dean, Professors, Associate Professors, Assistant Professors, and Lecturers of each Faculty (in Arts, after one year's experience,) have power to meet as separate boards, and to administer the affairs of each Faculty under such regulations as the Board of Trustees may prescribe.

For the Faculty of Medicine, the Dean, Professors, Associate Professors, and Assistant Professors have power to meet as a separate board, and to administer the affairs of the Faculty under such regulations as the Board of Trustees may prescribe.

The Principal and Vice-Principal are *ex-officio* members of each of the Faculty Boards.

The Functions of the Faculty Boards are:

(1) To recommend to the Senate courses of study leading to a degree, and the conditions of admission.

(2) To decide upon applications for admission or for change of course, subject to the regulations of the Senate.

(3) To submit to the Senate names for both ordinary and honorary degrees.

(4) To arrange the time-table for classes and to edit the Faculty Calendar, subject to the approval of the Senate.

(5) To control registration, and determine the amount of fees and manner of payment, subject to the regulations of the Senate and the approval of the Board of Trustees.

(6) To deal with class failures.

(7) To exercise academic supervision over students.

(8) To make such recommendations to the Senate as may be deemed expedient for promoting the efficiency of the University.

(9) To award Faculty Scholarships, Medals, and Prizes.

(10) To appoint within the limits of the funds made available by the Trustees such sessional assistants, fellows, tutors, and demonstrators as shall be needed to give instruction in the subjects taught by the Faculty.

(11) To pass such regulations and by-laws as may be necessary for the exercise of the functions of the Faculty.

OFFICERS OF ADMINISTRATION

CHANCELLOR

JAMES RICHARDSON, B.A., LL.D.

PRINCIPAL AND VICE-CHANCELLOR

W. HAMILTON FYFE, M.A., LL.D.,

RECTOR

OSCAR D. SKELTON, M.A., Ph.D.

VICE-PRINCIPAL AND TREASURER

W. E. MCNEILL, M.A., Ph.D.

REGISTRAR

ALICE KING

THE BOARD OF TRUSTEES

Chairman

J. M. MACDONNELL, M.A.

Secretary

W. E. MCNEILL, M.A., Ph.D.

Ex-officio Members

JAMES A. RICHARDSON, B.A., LL.D.	Chancellor
W. HAMILTON FYFE, M.A., LL.D.	Principal
O. D. SKELTON, M.A., Ph.D.	Rector

Retire 1932

HON. MR. JUSTICE W. A. LOGIE, M.A., LL.B. ⁶	Toronto
T. H. FARRELL, M.D. ¹	Utica, N.Y.
DENNIS JORDAN, B.A., M.D., C.M. ⁶	Toronto
W. F. NICKLE, B.A., K.C. ¹	Kingston
REV. LESLIE PIDGEON, D.D. ⁶	Montreal

Retire 1933

REV. G. A. BROWN ⁵	Kingston
R. CRAWFORD, B.A. ⁴	Kingston
W. CURLE, M.A., K.C. ⁶	Montreal
J. G. DWYER, M.D., LL.D. ⁶	New York
SENATOR H. H. HORSEY, B.A. ¹	Ottawa
D. H. LAIRD, M.A., K.C. ¹	Winnipeg, Man.
JUDGE H. A. LAVELL, B.A. ³	Kingston
J. M. MACDONNELL, M.A. ⁷	Toronto
D. I. MCLEOD, B.A. ⁶	Toronto
R. O. SWEZEY, B.Sc. ³	Montreal

Retire 1934

J. MACKINTOSH BELL, M.A., Ph.D., LL.D. ⁷	Almonte
J. C. CONNELL, M.A., M.D. ⁶	Kingston
W. L. GRANT, M.A., LL.D. ²	Toronto
SENATOR ANDREW HAYDON, M.A., LL.B. ⁶	Ottawa
E. R. PEACOCK, M.A. ⁶	London, Eng.
ALEXANDER LONGWELL, B.A., B.Sc. ¹	Toronto
J. M. FARRELL, B.A., K.C. ³	Kingston
F. D. REID, B.Sc. ⁴	Cobalt
CHARLOTTE E. WHITTON, M.A. ³	Ottawa

Retire 1935

J. M. CAMPBELL, Esq. ⁷	Kingston
ELMER DAVIS, Esq. ⁶	Kingston
G. F. Henderson, B.A., K.C. ²	Ottawa
A. J. MEIKLEJOHN, B.A. ⁶	Kingston
MRS. GEORGE ROSS, B.A. ⁶	Toronto
V. K. GREER, M.A. ³	Toronto
O. D. SKELTON, M.A., Ph.D., F.R.S.C. ³	Ottawa

Retire 1936

JACKSON BOOTH, Esq. ²	Ottawa
T. A. MCGINNIS, B.Sc. ²	Kingston

¹Elected by the University Council for three years.

²Elected by the Benefactors for four years.

³Elected by the Graduates for three years.

⁴Elected by the Board of Trustees to represent the Faculty of Applied Science for three years.

⁵Elected by the Faculty of Queen's Theological College for one year.

⁶Elected by the Board of Trustees for four years.

⁷Elected by Benefactors to represent the Faculty of Applied Science for three years.

THE UNIVERSITY COUNCIL

Registrar

J. M. FARRELL, B.A.

Ex-officio Members

THE CHANCELLOR

THE PRINCIPAL

THE MEMBERS OF THE BOARD OF TRUSTEES

THE MEMBERS OF THE SENATE

Elective Members

Retire 1932

E. T. CORKILL, B.S., M.E.	Toronto
C. W. DRURY, B.Sc., Ph.D.	Toronto
JUDGE A. G. FARRELL, B.A.	Regina, Sask.
C. F. HAMILTON, M.A.	Ottawa
REV. J. W. MCINTOSH, M.A.	St. Johnsbury, Vt.
W. A. NEWMAN, B.Sc.	Montreal

Retire 1933

R. W. ANGLIN, M.A.	Toronto
D. D. CALVIN, B.A.	Toronto
*T. H. FARRELL, M.A., M.D.	Utica, N.Y.
SENATOR A. HAYDON, M.A., LL.B.	Ottawa
*SENATOR H. H. HORSEY, B.A.	Ottawa
F. KING, M.A., K.C.	Kingston
D. H. LAIRD, M.A.	Winnipeg
*W. F. NICKLE, B.A., K.C.	Kingston
MRS. G. SILVERTHORNE, B.A., M.D.	Toronto

Retire 1934

C. LAIDLAW, B.A., M.D.	Ottawa
R. W. BROCK, M.A., LL.D., F.R.S.C.	Vancouver, B.C.
D. G. BROWNE, B.Sc.	Toronto
J. W. MARSHALL, B.A.	Niagara Falls
W. H. RANKIN, M.D., LL.D.	Brooklyn, N.Y.
T. A. MCGINNIS, B.Sc.	Kingston
LORNE PIERCE, M.A., Ph.D., LL.D., F.R.S.C.	Toronto

Retire 1935

DENNIS JORDAN, B.A., M.D.	Toronto
REV. NEIL M. LECKIE, B.A., B.D.	St. Mary's
MRS. J. MACGILLIVRAY, M.A.	Kingston
F. ETHERINGTON, M.D., C.M.G.	Kingston
A. A. MACKAY, B.Sc.	Montreal
F. J. HOUSTON, M.D.	Hamilton
G. C. MONTURE, B.Sc.	Ottawa
E. C. WATSON, M.A., M.D.	Detroit

Retire 1936

E. A. COLLINS, B.Sc.	Copper Cliff
REV. EBER CRUMMY, B.Sc., D.D.	Carberry, Man.
A. B. CUNNINGHAM, B.A.	Kingston
V. K. GREER, M.A.	Toronto
*ALEX. LONGWELL, B.A., B.Sc.	Toronto
R. K. PATTERSON, M.D.	Ottawa
MARION REDDEN, B.A.	Kingston
GORDON SMITH, B.A., B.Sc.	Kingston

Retire 1937

G. C. BATEMAN, B.Sc.	Toronto
A. E. DAY, M.A., K.C.	Kingston
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J. G. DWYER, M.A., M.D., LL.D.	New York
W. S. KIRKLAND, M.A.	Toronto
MRS. H. A. LAVELL, B.A.	Kingston
REV. J. Y. MCKINNON, M.A., B.D.	Brantford
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P. G. C. CAMPBELL, M.A.	Retires 1934
NORMAN MILLER, M.A., Ph.D.	Retires 1935

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A. JACKSON, B.Sc.	Retires 1934
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The Faculty of Medicine

THOMAS GIBSON, M.D.	Retires 1933
L. J. AUSTIN, F.R.C.S.	Retires 1933
D. C. MATHESON,	Retires 1933

Queen's Theological College

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 200 Frontenac Street
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 F.G.S.A.,
The Miller Memorial Research Professor in Geology,
 98 Bagot Street.
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The James Douglas Professor of History,
 115 L. Union Street
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 7 Wellington Street
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 68 Collingwood Street.
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 295 Alfred Street.
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Associate Professor of Biology,
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Assistant Professor of Mathematics,
 213 Queen Street.

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Assistant Professor of Chemistry,
Annandale Apts., Sydenham Street.
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148 University Avenue.
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Dean of Women and Assistant Professor in German,
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181 University Avenue.
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172 Barrie Street.
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Lecturer in Physics
24 Stewart Street.
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 Y. M. C. A.
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 72 Division Street.
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 Queen's University.
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Lecturer in French,
 247 Brock Street.
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Instructor in Mathematics,
 25 Concession Road.
- JEANNE M. MCCONNELL, B.S., C.A.P.,
Instructor in French,
 31 Ellerbeck Street.
- M. C. McNAB, M.A.,
Instructor in Chemistry,
 Queen's University.
- J. BEWS,
Physical Instructor for Men,
 College Street.
- ETHELWYNNE MURPHY,
Physical Instructor for Women,
 Annandale Apartments.

TUTORS

Tutors in Latin: W. H. Showman, M.A., Catherine E. O'Brien, B.A., Alice Babcook.

Tutor in Greek: Alice Babcook.

Tutors in French: Elizabeth Henstridge, Mary Rayson, Annella Minnes, B.A., Mary Dean, Laura Doherty.

Tutors in German: Mrs. O. L. Bochstahler, A.B., Walter Ade.

Tutor in Spanish: Emily Williams.

Tutors in English: Margaret Reid, B.A., Mary Chown, B.A., Margaret Davis, M.A., Marion Duthie, M.A., Margaret Seager, B.A., Doris Kent, Grace Davis, M.A., H. W. Alford.

Tutors in Economics: W. A. Spencer, R. C. Sharpe, A. B. Handler, B.A., C. F. Holland, N. H. Evelyn, E. R. McGill, D. A. Smith.

Tutors in Mathematics: A. W. Bishop, J. R. Black, M. M. Liebeck, M. J. Macphail, Jean Scobie, A. N. McLeod, G. G. McLeod, Grace Miller, J. W. MacNaughton.

Tutor in Physics: W. J. Henderson, B.A.

Tutors in Chemistry: M. G. Allmark, W. Mitchell, J. E. Williams, Ruth Sharpe, J. E. Thom, J. G. McNab, Marion Curtis, B. G. Gardiner, B.A., J. H. Cowan, J. A. Stevenson.

Tutors in Biology: E. O. Ebersole, M.A., Mary Baker, B. G. Gardiner, B.A., R. E. Helmer.

Tutors in Philosophy: Rev. A. D. Matheson, Douglas Smith.

Tutors in History: T. D. Walter, B.A. (first term), Ross Winter, J. W. Grimmon, J. A. Huggins, Edith Ashcroft, B.A.

OTHER OFFICERS

Librarian

E. C. KYTE

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Curators of the Museum

THE PROFESSORS OF BIOLOGY AND GEOLOGY

Director of the Summer School

PROFESSOR MACCLEMENT

Director of Extension Work

A. W. CURRIE, B.A., B.Com. (Queen's)

Secretary of the General Alumni Association and Manager of the Employment Bureau

GORDON J. SMITH, B.A., B.Sc. (Queen's)

Superintendent of Buildings

JAMES BEWS

Secretary-Treasurer Athletic Board of Control

C. C. HICKS

EQUIPMENT AND SPECIAL FACILITIES

THE LIBRARY

The University Library was removed from the Old Arts building to the new Douglas Library building during the summer of 1924. The new building provides one large reading room, three smaller ones, a number of conference rooms, exhibition rooms and offices for the library and administrative staff.

In the main reading room will be found a collection of some 5,000 volumes of general reference works on open shelves. The main collection, shelved on five tiers of book-stalls, occupies the centre of the building. The general library now includes about 150,000 volumes as well as many original manuscripts and prints.

The system of classification used is that of the Library of Congress.

Seven hundred and fifty journals and other serials are currently received.

In addition to the general library there are departmental libraries for physics; chemistry; mining and metallurgy; geology and mineralogy; civil, mechanical and electrical engineering.

The library of the Medical Faculty, now in the Douglas Library building, has its own reading room, and is administered by the staff of the general library.

The Lorne Pierce Collection of Canadian Literature is very rich in first editions, original manuscripts and rare Canadiana.

The Shortt-Haydon Collection of portraits and views relating to Canada is one of the finest collections of its kind in existence.

THE MUSEUMS

The Biological Museum on the first floor of Theological Hall, has a large Botanical collection illustrating fully the flora of North America, Europe, Asia, South Africa, and Australia; a Zoological collection representing the Canadian fauna by a large number of prepared specimens of mammals, birds, reptiles, fishes, insects, and mollusca.

A splendid building in memory of the late W. G. Miller has recently been erected for the departments of Geology and Mineralogy. On the main floor is a large museum containing many specimens of minerals, ores, rocks, and fossils, and a fine Ethnological collection of weapons, utensils, dresses and ornaments.

THE LABORATORIES

The Biological Laboratories are in Theological Hall, and are provided with material for dissection and with microscopes and other instruments.

The Chemical laboratories are in Gordon Hall. On the third floor are two laboratories for General Chemistry, one for Medical Chemistry, and one for Electro-Analysis. On the second floor are two for Quantitative Analysis, one for Organic Chemistry, one for Food and Water Analysis, and one (not yet equipped) for whatever future development demands. On the first floor are three for Qualitative Analysis, one for Industrial Chemistry, one for Physical Chemistry, one for Gas Analysis, one for Spectroscopy, and one dark room for Photography. Besides these there are small separate laboratories for research work.

The Physical laboratories are in the southern half of Ontario Hall. The first and third floors are used for undergraduate laboratory work. In the basement and on the second floor rooms are set apart for research and other special work.

THE OBSERVATORY

The Observatory has a transit room, a computing room, and an equatorial room with revolving dome. The equatorial telescope has a six-inch objective, declination and right ascension circles, and a driving clock. The transit has a three and a half inch objective. The further equipment consists chiefly of a striding level, a chronograph, a mean time clock, and a sidereal time clock.

FACILITIES FOR FIELD WORK

Geology and Mineralogy. In the vicinity of Kingston a greater variety of economic minerals and metalliferous ores is mined than in any similar area in Canada. Through the kindness of the managers the various mines may be visited by the Geology and Mineralogy classes, and students may thus obtain valuable information concerning field conditions.

Botany. The great diversity of land surface in the vicinity of Kingston enables the students of Botany readily to make field studies of the various plant associations. Within two miles of the city limits are

extensive reed marshes, bordered by water gardens well stocked with the swimming and submerged societies of plants. A drive of eight miles permits the study of an excellent example of sphagnum moor, with all the plants of our latitude characteristic of muskeg conditions. An hour's drive in another direction reaches a region of high, dry, granite hills where xerophytic modifications dominate the flora. A carefully preserved mesophytic meadow with a forest plantation is within walking distance of the University.

FACILITIES FOR ATHLETICS

The University provides ample facilities for athletics. A new gymnasium, one of the finest in Canada, was built during the summer of 1930. In the University Grounds is a large covered skating rink with artificial ice. A block from the University is the football field, with the George Richardson Memorial Stadium given by Mr. James Richardson in memory of his brother, Captain George Richardson, a Queen's graduate and a former athlete, who was killed in the Great War. There is room and equipment for all students who wish to take part in football, hockey, basketball, tennis, track athletics, swimming, boxing, fencing, or wrestling.

GENERAL INFORMATION

DEGREES

By the Royal Charter granted to Queen's College, it is "willed, ordained, and granted, that the said College shall be deemed and taken to be an University, and that the students in the said College shall have liberty and faculty of taking the degree of Bachelor, Master, and Doctor in the several Arts and Faculties."

The degrees at present conferred under the statutes of the University are as follows:

I.—HONORARY DEGREES

Doctor of Divinity, D.D.; Doctor of Laws, LL.D.

II.—DEGREES BY EXAMINATION

1.—In Arts

Bachelor of Arts, B.A.; Bachelor of Commerce, B.Com.; Master of Arts, M.A.; Doctor of Philosophy, Ph.D.

2.—In Theology

Bachelor of Divinity, B.D.

3.—In Medicine

Doctor of Medicine, M.D.; Master of Surgery, C.M.; Diploma of Public Health, D.P.H.; Doctor of Science, D.Sc.

4.—In Applied Science

Bachelor of Science, B.Sc.; Master of Science, M.Sc.

HOODS

Each Degree has its distinctive hood, as follows:

B.A.—Black, bordered with red silk.

B.Com.—Black, bordered with green silk.

M.A.—Black,, lined with scarlet silk, bordered with scarlet.

B.D.—White, bordered with crimson plush.

M.D. and C.M.—Scarlet, bordered with white.

B.Sc.—Black, bordered with yellow (old gold) silk.

M.Sc.—Black, lined with yellow, bordered with yellow.

D.Sc.—Yellow silk, bordered with black.

D.D.—Purple silk, lined with white silk, bordered with white.

LL.D.—Black silk, lined with blue silk, bordered with blue.

Ph.D.—Black silk, lined with purple, bordered with white.

COUNCIL OF LEGAL EDUCATION OF GREAT BRITAIN

Queen's University has been approved by the Council of Legal Education of Great Britain and her degree examinations now qualify students for admission at any one of the four Inns of Court. Regulations for entry at any one of the Inns may be seen at the office of the Principal.

INFORMATION FOR WOMEN STUDENTS

The Dean of Women is ready to give women students information and advice regarding any matter pertaining to their life at the University. She should be consulted about the planning of courses and should be notified concerning cases of illness.

The University Residences Rooming and Boarding Houses

All first year women students under twenty-five and not resident in the city of Kingston are required to live in Ban Righ Hall or in one of its annexes.

(For the purpose of this regulation students who have credit for five or more classes at the University, taken either intra-murally or extra-murally, will not be considered as belonging to the first year.)

All other women students not resident in the city of Kingston are required to live either in one of the university residences or in a supervised rooming or boarding house.

The above regulations apply to the winter session only. During the summer the university residences are open for the benefit of all women students attending the Summer School and of students taking physical culture and Upper School courses.

Particular attention is called to the regulation that women students are under no circumstances permitted to lodge in houses in which any man other than the husband or son of the lodging-house keeper is living or lodging. This applies to the Summer School as well as to the regular winter session.

Application forms for admission to the university residences, full information concerning the residences, the rates charged and rules in force, lists of supervised rooming and boarding houses for the winter session, with information concerning the regulations governing them, and lists of recommended rooming and boarding houses for the Summer School can all be obtained from the office of the Dean of Women.

Academic Dress

During the winter session women students are expected to wear academic gowns at lectures. These gowns may be ordered in Kingston after the opening of the session or they may be made from patterns purchased through the Dean of Women's office.

Gymnasium Costume

The correct gymnasium costume for women students costs \$1.95 and may be ordered on arrival. White Badminton shoes and socks are worn with suit.

Grey cotton bathing suits must be worn in the University swimming pool. These may be obtained at the gymnasiums for \$1.00.

EXPENSES

At the present time the average student pays for table board from \$5.00 to \$6.00 a week, and for room from \$2.50 to \$3.50 a week.

See FEES for other expenses.

Lists of Boarding Houses for men students may be obtained from the Registrar. Meals may be obtained at the cafeteria in the Students' Union.

EXTENSION LECTURES

Members of the staff are prepared to lecture at outside points on a great variety of subjects. The lectures are specially suitable for University extension work, for courses of study planned by various organizations, and for teachers' conventions. A complete programme of lectures and full information on any point connected with them will be supplied upon application to the Registrar, Queen's University.

PHYSICAL WELFARE OF STUDENTS

Every student is required upon registration to contribute \$4 towards a health insurance fund which the University will use to provide medical care for those who are ill. Details of the plan will be available at registration.

All students in their first year are required to take physical training for two hours a week, unless excused on account of military training with the Officers' Training Corps. They are examined by the University physician, who prescribes proper exercises to correct physical defects.

VACCINATION

Every student registering for the first time must submit evidence of successful vaccination.

ATTENDANCE AT CHURCH

All students are expected to attend a church of the denomination to which they belong.

During the session, Sunday services are conducted in the University by representatives of different denominations who are invited to preach to the students, professors, and visitors.

STUDENT SELF-GOVERNMENT

Queen's was the first University in Canada to introduce student self-government. All students are members of the Alma Mater Society, the chief instrument of student government, and are expected to share in its duties and responsibilities.

THE CANADIAN OFFICERS TRAINING CORPS

The Queen's University Contingent of the C.O.T.C., formed at the outbreak of the Great War under Lieut.-Col. A. B. Cunningham, was organized as a Unit of the Militia in February, 1915. Reorganized after the war by Col. A. Macphail, C.M.G., D.S.O., it is now commanded by Lieut. Col. P. G. C. Campbell, and consists of three companies, "A" Coy. (Arts), "B" Coy. (Medicine), and "C" Coy. (Science).

The training, after the recruit year, prepares for examinations. "A" certificate qualifies for the rank of Lieutenant, and "B" certificate for that of Captain.

Commissions in the Permanent Force are offered from time to time to qualified members of the C.O.T.C. Students who enrol in their first year, complete the year's training, and are returned as fully efficient, are excused from Physical Training.

EMPLOYMENT SERVICE

An Employment Service has been in successful operation at the University for several years. It is under the jurisdiction of the Service Control Committee of the Engineering Society and administered by the Secretary of the General Alumni Association. It is financed by the Engineering Society and the University. The objects of the Service are to assist graduates in all Faculties to secure suitable positions, and to help students obtain work during vacation periods.

Communications should be addressed: Manager, Employment Service, Queen's University.

REGISTRATION

All students are required at the beginning of each session to have their names entered upon the University Register.

Intra-mural students must register *in person*, paying full fees for the session. Those registering before the opening of the session will be charged the regular fee, but those registering on or after the first day of session will be charged an extra fee of \$3. In addition, those who have not previously obtained permission to defer registration must pay a special late fee of \$1 a day from September 29 to October 8. No student may register after October 8 unless he has obtained special permission before the opening of session.

For Extra-mural registration see REGULATIONS REGARDING EXTRA-MURAL WORK.

ADMISSION TO THE FACULTY OF ARTS

1. Candidates desiring to enter the Faculty of Arts should make application during the summer on forms supplied by the Registrar.

The application should be accompanied by matriculation or other certificates.* These will be returned when the candidate's standing is determined.

I—ADMISSION BY MATRICULATION

2. Matriculation examinations are conducted for the Universities of Ontario by the University Matriculation Board. Details regarding these examinations may be found in a separate publication entitled **REQUIREMENTS FOR MATRICULATION**. This also contains a list of the Matriculation Scholarships and the conditions of award.

3. The Matriculation examinations are of two grades, elementary and advanced, called respectively *Pass* and *Honour* Matriculation.

A. Pass Matriculation

4. The subjects of Pass Matriculation are as follows: *Latin, English, Canadian and Ancient History* (with Music as an option for Ancient History), *Mathematics*, and any two of the following: *Greek, German, French, Spanish or Italian, Experimental Science* (Physics and Chemistry) or *Agriculture*.

Two papers are set in each of the six subjects and the pass standard is fifty per cent. in each paper.

5. A candidate who presents a certificate of Pass Matriculation will be admitted to the first year in Arts and may expect to graduate in four years if he is on a Pass course, five years if he is working towards an Honours degree.

*Candidates holding certificates from the Department of Education of Ontario should send their certificates to the Registrar, Queen's University, in order to have standing allowed. Candidates holding certificates from Departments of Education outside of Ontario should write to the Departments concerned asking that their marks be sent to the Registrar, who will then advise regarding the standing allowed.

B. Honour Matriculation

6. Honour Matriculation examinations are held in the following subjects:

Latin (two papers), *English* (two papers), *Modern History* (one paper), *Mathematics* (Algebra, Geometry, Trigonometry, and Problems, one paper in each), *Greek* (two papers), *German* (two papers), *French* (two papers), *Spanish* (two papers), *Physics* (one paper), *Chemistry* (one paper), *Biology* (one paper in each of Zoology and Botany).

The pass standard is fifty per cent. in each paper.

7. A candidate who has Honour Matriculation in less than four subjects but who has obtained first class Honours in any of these subjects may, on payment of the *pro tanto* fee, receive credit for these towards a degree.

8. Candidates presenting certificates covering four or five subjects of Honour Matriculation may count these towards a degree except in the case of sciences where the following uniform allowances will be made:

(a) A candidate taking no further work in Physics or Chemistry or Biology, or who has obtained first class Honours in the Honour Matriculation examinations in these subjects, will be allowed full credit for Physics 1 or Chemistry 1 or Biology 1 or 2.

A candidate proceeding to advanced work whose standing is that of second class Honours will be granted exemption from attendance and laboratory work but must pass the examination in Physics 1 or Chemistry 1 or Biology 1 or 2 and will be allowed to take the second course in the Department concerned together with four other courses.

A candidate whose standing in the Honour Matriculation examination in any of these sciences is below second class must, if he intends to take further work, repeat in full Physics 1 or Chemistry 1 or Biology 1 or 2, and must postpone the second courses in these subjects until the following year.

(b) Mathematics 1 may be granted on any two papers of Upper School Mathematics to a candidate who will not proceed to higher work in that subject, or take Physics 2 or Chemistry 14.

9. A candidate with Honour Matriculation in five subjects may expect to graduate in three years if he is on a Pass Course.

10. Students who desire credit towards a degree on work done outside of the University must pay a *pro tanto* fee of ten dollars.

11. No allowance will be given for credits on Honour Matriculation or similar non-academic examinations if such credits are earned subsequent to a candidate's first registration at Queen's University.

II—ADMISSION BY EQUIVALENT EXAMINATION

A. Examinations Equivalent to Pass Matriculation

12. The following certificates are accepted for Pass Matriculation in the subjects which they cover provided that 50% has been made in each paper.

Alberta	Third Year High School.
British Columbia	Grade XI.
Manitoba	Grade XI.
New Brunswick	First Class License.
Newfoundland	Associate (Junior).
Nova Scotia	Grade XI (average 60, minimum 50).
Ontario	Entrance to Normal School.
Prince Edward Island	Honour Diploma or First Class License or Second Year Certificate from Prince of Wales College.
	} The University School Leaving.
Quebec	} Grade XI Diploma.
Saskatchewan	Second Class, Third Form High School.

B. Examinations Equivalent to Honour Matriculation

13. The following certificates are accepted for Honour Matriculation in the subjects in which at least fifty per cent. has been made in each paper.

Alberta	Fourth Year High School.
British Columbia	Grade XII.
Manitoba	First Class.
New Brunswick	Grammar School.
Newfoundland	Associate Grade.
Nova Scotia	Grade XII.
Ontario	Upper School.
Prince Edward Island	Honour Diploma of Third Year. Prince of Wales College.
Saskatchewan	First Class, Fourth Form High School.

III—ADMISSION TO ADVANCED STANDING

14. A student applying for admission to advanced standing with allowance on credits at another University must have an official certificate of standing forwarded to the Registrar for consideration with a statement of honorable dismissal. He will be given equivalent standing but must comply with all regulations of Queen's University governing the Course he wishes to complete.

No credits obtained at another institution will be accepted for any of the last five classes offered by a candidate for degree at Queen's.

IV—ADMISSION BY SPECIAL REGULATION

15. Unmatriculated students who present certificates showing that they are over the age of twenty-one, may be admitted if they satisfy the Board of Studies that they can profitably undertake university work.

A candidate admitted under this Regulation must, with the exceptions noted below, obtain credit in course 1 of the subjects in which he lacks matriculation in order to remove his entrance condition. In the case of Latin and French, however, he must within two years pass the regular matriculation examinations.

REGULATIONS REGARDING EXTRA-MURAL WORK

All inquiries regarding regulations should be addressed to the Registrar.

In order to meet the needs of students who are unable to do all their work in residence, of teachers in actual service who wish to improve their professional qualifications in certain subjects, and of those persons in general who, though unable to attend the regular classes, are yet desirous of pursuing particular studies under competent direction, the University conducts a system of extra-mural instruction. This work is as nearly as possible identical with that taken up by the intra-mural students and the same examinations are set for all. Candidates who fulfil at least the minimum requirements of residence and otherwise comply with the conditions stated below may qualify for the various degrees to which their Courses lead.

For details of the work offered for the summer of 1931 and winter 1931-32 see page 48.

Conditions of Admission to Extra-mural Work

1. In order to register for the first time extra-mural students must be twenty-one years of age and residents of Canada. Students residing outside of Canada, however, who have attended the University for one session or who have taken work extra-murally for one session are allowed to complete their Course.

2. Fully matriculated students under twenty-one years of age may be allowed to register on satisfying the Faculty that they are unable to attend the University until a later date.

A student over twenty-one years of age who is not a candidate for a degree or diploma may register without matriculation standing in any course in which he desires to improve his scholarship, provided that he can satisfy the Board of Studies of his ability to proceed with the work desired.

3. Except with the permission of the Board of Studies, no one is permitted to take work at Queen's in the same year as he is taking work at any other educational institution or writing on any outside examination other than Pass Matriculation.

4. An intra-mural student may become an extra-mural student only by special permission of the Faculty. A student registered intra-murally

in the winter session will not be allowed to continue his course extra-murally in the following summer, unless by special permission he has been allowed to postpone one or two courses until the summer. In such case, however, he must attend the Summer School. But any student may, in preparation for the September Supplemental examinations, register for instruction in courses in which he failed in the sessional examinations of the previous December or April, if they are offered extra-murally in the summer.

Registration in Extra-mural Courses

5. Application for registration must be made on forms supplied by the Registrar, and must satisfy the conditions stated in section 6. They must reach the University by the dates mentioned in section 7; and they must be accompanied by the fees specified in section 8.

6. (a) An extra-mural student may not register for more than four courses in the academic year. He may register in the winter (September-April) for as many as two courses or four half-courses, and in the Summer* (April-September) for two courses or three half-courses.

(b) The courses selected in each year are subject to approval of the Board of Studies and, in the case of candidates for degrees, must conform to the regulations for concentration, distribution, and sequence of work.

(c) Courses 1 and 2 in any subject except History, Economics, and Philosophy must be taken in different academic years.

(d) Before registering a student should consult the time-table of lectures, as he must not register in two classes which meet at the same hour. The summer time-table is given in the Summer School Announcement.

7. (a) Extra-mural students should register two or three weeks before the session opens in order that they may receive the preliminary instructions and provide themselves with books in time to start work promptly. They will be allowed to register up to September 10 for the winter or April 10 for the summer at the regular fee, and up to September 17 or April 17 on payment of an extra fee of \$3. Only under

*The Calendar is issued in the spring but is not in force until the following autumn. The work of advanced whole courses, however, given at Summer School, will be based on the prescription in the calendar for the next session, since these courses must be completed during the following winter.

exceptional circumstances and by special permission of the Faculty will registration be accepted after these dates.

(b) Extra-mural students cannot receive the examination returns before the last date of registration but should send fees to the Registrar within the required dates, stating the classes in which they wish to register if successful in their examinations. Necessary changes may be made later.

8. The fees payable upon application for registration are as follows:

(a) *Registration.* A registration fee of \$10 must be paid once in each year, and an extra fee of \$3 for late registration as provided in section 7 (a).

(b) *Tutorial.* The tutorial fee is \$10 for each course and \$5 for each half-course (indicated in departmental prescriptions by the letter *a* or *b* after the number). If the required amount of work in a course is not completed in the session, winter or summer, in which it is begun, the tutorial fee must be paid again, and the full work of the course sent in. See also section 22b.

(c) *Pro Tanto.* A student desiring to have courses credited on work done elsewhere must pay a *pro tanto* fee of \$10 at the time of his first registration.

Minimum Residence Requirements

The University does not undertake to make it possible for a student to get a degree if he merely satisfies the minimum residence requirements given below, since in some subjects only a limited amount of instruction can be given extra-murally or in the Summer School. In the Sciences, for example, all the laboratory work must be done at the University and a student specializing in these subjects may find it necessary to spend two or three years in residence. Candidates should examine the various departmental prescriptions in connection with the Regulations for Concentration.

9. Candidates for a degree must take at least nine courses in attendance at the University, either during regular Winter sessions or at the Summer School. Candidates for an Honours degree must attend during at least one regular winter session. In most cases an Honours Course will require much more than this minimum time. Examinations must be passed after each session's work.

10. Candidates for Specialists' certificates must attend at least two full sessions or, under the direction of the University, one full session and at least two sessions of the Summer School.

The Department of Education is willing to accept attendance of four years at the Summer School as covering attendance requirements for the Inspectors' Course.

Manner of Conducting Extra-mural Classes

(See also section 22)

11. The method of giving extra-mural instruction necessarily varies with the subject. Detailed information is contained in the instruction sheets provided from time to time. These specify the prescribed reading, assign exercises and essays to be written, and in some cases give the substance of intra-mural lectures. The first instalment of work is sent to the student as soon as he registers. The date of each essay or exercise coming in and of each criticism or fresh piece of work going out is recorded at the Registrar's Office. Each essay or exercise is promptly examined and returned to the writer with criticisms and suggestions.

Students should address their work and all enquiries regarding their work to The Director of Extension Courses, Queen's University, Kingston, Ontario.

Regularity of Work

12. All exercises must be sent in by the dates specified or they will be returned unmarked and without credit.

Transference from Extra-mural to Intra-mural Classes

13. Extra-mural students may become intra-mural students during the winter session at any time after December 1, *in those courses in which they have satisfactorily completed the work prescribed up to the date of their transferring.* Fees already paid will be applied on intra-mural charges.

14. Students who transfer to intra-mural work before January may add enough "b" half-courses to give them five classes in the second term, if such half-courses are available and the pre-requisite work has been done.

Library Facilities for Extra-mural Students

15. Extra-mural students are expected to buy all text-books prescribed. They should also make generous provision for the purchase of

other books bearing on their work, as the Library cannot undertake to provide enough duplicates to serve the needs of students not in residence.

16. Three books may be borrowed at one time, provided that no two relate to the same piece of work. Unless a special arrangement is made, a book may be kept only two weeks from the date on which it is received.

17. Special arrangements are made for supplying the necessary books to extra-mural students in the Ph.D. Courses.

18. Extra-mural students must send to the Librarian a deposit of \$2 for the use of one book at a time, \$4 for two books, and \$5 for three. Books may be exchanged as often as the borrower wishes; and when all are returned, the deposit, less the amount spent for postage, will be repaid on request. No fee is charged for the use of the Library.

19. All communications concerning books and deposits must be addressed to The Librarian, Queen's University, Kingston, Ontario.

Regulations Regarding Examinations

Intra-mural and extra-mural examinations are the same in all subjects and are held at the same time. It is impossible, therefore, to modify the examination schedule to suit the personal convenience of students.

The attention of students is called to GENERAL REGULATION 10.

20. Examinations are held in December, April, and September, as follows:—

(a) Examinations in all half-courses of the first term are held *during the last week before Christmas*. These examinations are final and may not be postponed till April or September.

(b) Examinations in all whole courses and in half-courses of the second term are held at the end of April. Examinations in Pass courses (numbered under 10) and in such Honour courses as may be offered in the summer, may be postponed till the autumn, but such postponement will lessen the amount of new work which may be completed in September.

(c) Ordinarily an extra-mural student may not write in September on more than two courses or three half courses. He may write on three courses, however, if examinations in one or more have been postponed from April.

21. Applications for examination in the particular subjects upon which a student proposes to write, accompanied by the proper fees, must reach the Registrar's office by November 1 for the December examinations, by February 15 for the April examinations, and by July 15 for the Sep-

tember examinations. The fees are \$3.00 for each half-course examination and \$6.00 for each whole course examination, with an additional charge of \$3.00 for late application, if accepted.

If the Registrar receives notice, at least ten days before the beginning of examinations, that a candidate will not write on a subject for which he has applied, the fee will be credited to him after the deduction of an administrative charge of two dollars.

22a. No student will be admitted to examination in any subject in which he has not fulfilled the requirements as to date of registration (see section 7a) and regularity of work (see section 12). Candidates are expected to send in all the essays and exercises at the dates specified, and the grade given on a particular course will be determined by the amount and quality of the work done. No candidate will be admitted to examination who has done less than eighty per cent. of the prescribed work. The last of the written work should reach the University at least two weeks before examinations begin.

22b. If in any session, summer or winter, a student does not complete the required work in a course, he must register again, pay all the fees and do all the exercises.

23a. A student who fails in course 1 or 2 in any subject (in course 1, 2 or 3 in the case of History) must pay the tutorial fee again and do all the work of the course before being admitted to examination in a subsequent year, but may write in September of the same year if at least thirty per cent. was made in April.

23b. Extra-mural students who make less than thirty per cent. in the examination on any other course must repeat the tutorial work in that course unless excused by the Director of Extension Courses acting on the advice of the Department concerned.

24. If a student who has completed the required work in a given subject wishes in some subsequent academic year merely to take the examination, he must pay the registration fee of \$10.00 as well as the examination fee specified in Section 21. The registration fee is payable at the beginning of the session.

Students are warned that they postpone examinations at their own risk as no special papers will be set even if courses are discontinued or radically changed. If a candidate postpones an examination for two years, he must repeat the tutorial work unless excused by the Director of Extension Courses acting on the advice of the Department concerned.

25. Extra-mural students in any of the modern languages will be required to take an hour a week of oral work with one of the regular classes during their intra-mural residence, and pass an examination on

such work. Students attending the Summer School will be given an opportunity of completing this oral work in the languages offered in the Summer School.

26. Students taking German, French or Spanish as a special subject must satisfy the Department concerned as to their oral qualifications. When an examination is necessary it must be taken at the University. Practical examinations in Science must be taken at the University.

27. Examination centres have been established at most of the larger cities and towns throughout Canada and a list of such centres is sent to all extra-mural students several months in advance of the examinations. Consideration will be given to an application to establish a new centre. Such application, accompanied by the special fee of \$10, must be made by November 1 for December examinations, by February 15 for April examinations, and by July 15 for September examinations.

Determination of Standing

28. See sections 29 and 30 of GENERAL REGULATIONS beginning on page 65.

Fees for Extra-mural Students

29. A full statement regarding fees may be found under FEES.

30. Extra-mural students who enter as intra-mural students during the winter session will have their extra-mural fees applied on intra-mural charges. (See section 13.)

31. *In no case whatever will refunds be made.* In case of sickness, however, but under no other conditions, an application to have fees *carried over* will be considered if it is made within one month of registration and is accompanied by a doctor's certificate.

32. Cheques or drafts on any branch of the Bank of Montreal will be received at par. In other cases 15 cents per \$100 should be added to cover bank charges. Remittances should be made by Post Office or Express Order, by cheque, or registered letter.

Text-books

33. Texts may be obtained from the Technical Supplies Department, Queen's University Grounds, and Messrs. Uglow & Co., Kingston.

EXTRA-MURAL AND SUMMER SCHOOL WORK—SUMMER 1932, WINTER 1932-33

	Summer School compulsory	Summer Extra-mural; Summer School optional	Summer Extra-mural only	Summer School compulsory and winter Extra-mural	Winter Extra-mural
Latin	37a, 46b	1, 2, 3			1, 2, 3, 11
Greek	26a	A, 1			A, 1, 2, 12
German	Adv. classes from 22a, 23b, 33b, according to demand.	A, 1, 2			A, 1, 2, 32, 37a, 36b
Spanish			A, 1		A, 1, 2, 6
French	13a, 25a	1, 2		8	1, 2
English	20b, 24b, 33b	1, 2, 3			1, 2, 14, 16a, 18, 20
History	20a, 21b, D.S.S.	2	1, 3	12	1, 2, 3
Economics	13b, 19b, 60	1, 4	2, 16a		1, 2, 4, 25a, 63
Philosophy		1, 2			1, 2, 10, 23
Mathematics	10a, 11b, 13a, 16b	1, 2	3a, 7b		1, 2, 3a, 7b, 10a, 11b
Physics	1, 2, 11, 13b				1, 2
Chemistry	1, 2, 21a, 35b				
Biology	1, 2, 14b, 16a				
Geology	1				
Mineralogy	1				

EXTRA-MURAL AND SUMMER SCHOOL WORK

On the preceding page a Table shows all the courses offered through Extra-mural and Summer School instruction in the summer of 1932 and the winter of 1932-1933.

An explanation of this Table, together with the more important regulations, is given below in condensed form.

I. Summer School Compulsory

See Table under this heading. These courses are open only to those who attend the Summer School.

Registration required before April 11, with fee of \$10 if not paid in previous autumn.

No extra-mural tuition fee, except in courses 1 and 2 of the Sciences, Physics 11, and Economics 4 (\$10 for each course, payable on registration).

Preliminary work assigned on registration, but no extra-mural exercises except in courses 1 and 2 of the Sciences, and in Physics 11 and Economics 4.

Summer School attendance and work compulsory. Fee \$37.25, payable July 4.

Examinations in September; or in December for first term work and in April for second term work. Fee \$6 for each full course; \$3 for each half course, payable before July 15 or on November 1 or February 15, according as examinations are written in September, December, or April.

II. Summer Extra-Mural; Summer School Optional

See Table under this heading. These courses are offered in the Summer by Extra-mural work alone, or by Extra-mural work up to July 5, and Summer School work thereafter.

Registration required before April 11; fee of \$10 if not paid in the previous autumn.

Tuition fee of \$10 for each course, payable on registration.

Extra-mural work and exercises.

Summer School work and exercises optional; if taken, the fee is \$37.25, payable July 4.

Examinations in September; fee of \$6 for each course, payable before July 15.

III. *Summer Extra-Mural Only*

See Table under this heading. These courses are offered in the Summer only through Extra-mural work. They are not given in the Summer School.

Registration required before April 11, with fee of \$10 if not paid in previous autumn.

Tuition fee of \$10 for each full course and \$5 for each half course, payable on registration.

Extra-mural work and exercises.

Examinations in September; fee \$6 for each full course; \$3 for each half course, payable before July 15.

IV. *Summer School and Winter Extra-Mural*

See Table under this heading. These courses are partly covered in the Summer School; the rest of the work is done extra-murally in the winter.

Registration before April 11 with fee of \$10 if not paid in previous autumn.

Tuition fee of \$10 for each course, payable on registration.

Preliminary work assigned on registration but no summer extra-mural exercises.

Summer School attendance and work compulsory. Fee \$37.25, payable July 4.

Winter extra-mural work in following winter; without additional fee if registration fee was paid in spring; otherwise, \$10.

Examination in April. Fee \$6 for each course, payable before February 15.

V. *Winter Extra-mural*

See Table under this heading. These courses are offered in the winter through extra-mural work. Laboratory work in the Sciences and oral work in the Languages must be done later at the University.

Registration required before September 10 with fee of \$10 if not paid in previous spring.

Tuition fee of \$10 for each full course and \$5 for each half course, payable on registration.

Extra-mural work and exercises.

Examinations in December and April; fee \$6 for each full course; \$3 for each half course, payable before November 1 or February 15, according as examinations are written in December or April.

An extra-mural student may take four courses in a year with not more than two at any one time, summer or winter.

The registration fee of \$10 is payable once in the year; tutorial fees in September or April when beginning each course.

THE SUMMER SCHOOL

The twenty-third session of the Summer School begins at 8 a.m. on Tuesday, July 5, 1932, and closes at 5 p.m. on Friday, August 19.

Students are expected to register on Monday, July 4th. An extra fee of \$3 will be charged to those registering on Tuesday and an additional \$1 for each day after that date if later registration is permitted.

Courses will be given in Latin, Greek, German, French, English, History, Philosophy, Economics, Mathematics, Physics, Chemistry, Biology, Mineralogy and Geology. By reason of daily lectures and almost individual instruction, it is possible to cover about half the work done in the corresponding courses of the winter session.

The libraries and various laboratories are available for use as in the winter session.

Ban Righ Hall, the women's residence, will be open during the summer and will accommodate one hundred students. Applications for rooms should be sent as early as possible to the Dean of Women.

Purpose of the Summer School

The Summer School offers University advantages to those who cannot attend the classes of the regular session.

It gives TEACHERS an opportunity to improve their scholarship in particular lines of study, to observe methods of teaching, and to become acquainted with books and equipment not ordinarily available.

It gives INTRA-MURAL students who have lost standing through illness or other causes an opportunity of qualifying for the September Supplemental examinations. Moreover, intra-mural students in their first or second years, who are unable to carry the required five courses, may, with the consent of the Board of Studies, take three or four courses in the winter and the rest extra-murally in the summer, provided that they attend the Summer School.

It gives EXTRA-MURAL students an opportunity to take the oral work required in the modern languages, to do in the laboratories the practical work required in the Science courses, and to satisfy by attendance at five sessions the minimum residence requirements for the degree of B.A. (See sections 9 and 10 under REGULATIONS REGARDING EXTRA-MURAL

WORK). Two sessions of the Summer School are accepted by the Department of Education as equivalent to one of the two winter sessions required for Specialists' Certificates.

Admission

No examination is required for admission to the Summer School. The classes are open to all who desire to improve their scholarship or professional equipment. Candidates for a degree, however, must satisfy matriculation requirements before being admitted to the University work and examinations, and must register for summer work in April.

No student working for credit is allowed to register for more than two courses or three half-courses in the Summer School.

Examinations

No examinations are held in connection with the Summer School. Students desiring credit for their work should write at the regular University examinations in September. See sections 12, 20, and 22 under REGULATIONS REGARDING EXTRA-MURAL WORK.

Fees

See FEES, page 53.

Further Information

The Announcement of the Summer School, containing full details concerning the work offered, is published each year in March, and is supplied on application.

All inquiries concerning the Summer School should be addressed to The Registrar, Queen's University, Kingston, Ontario.

FEES

Cheques tendered in payment of fees should be certified by the banks upon which they are drawn.

INTRA-MURAL

Fees are payable each year upon registration.

A student is not registered and may not attend classes until he has paid the required fees.

Sessional Fee—including Registration, Tuition, Library; Examinations, Health Insurance, Union, Faculty Societies, Athletics (the athletic fee which is part of student interests gives admission to all home games except play-offs), Alma Mater, and Journal\$120 00

Laboratory:

Fees for all Science courses:

Each whole course 3 00

Each half course 1 50

Deposit for all courses in Science (unused portion will be refunded at close of session):

Without Chemistry 5 00

With one course in Chemistry 10 00

With two or more courses in Chemistry..... 20 00

The fees specified below are payable as they are incurred.

Special Charges:

Pro tanto allowance of courses on work done elsewhere.. 10 00

Late registration (see also note, page 5) 3 00

Change of courses after registration 2 00

Special fee for students in Commerce, third and fourth years 15 00

Late application—for examination or graduation..... 3 00

Special examinations given at the University when a regular examination is missed:

One examination 5 00

Two or more examinations 10 00

Examinations at outside centres:

Each whole course 6 00

Each half course 3 00

Supplemental examinations:

Each whole course	6 00
Each half course	3 00

Special students not paying full fees:

Each course taken	25 00
(Student interests and Laboratory charges as above)	

Graduation:

Bachelor of Arts (in Course)	10 00
Bachelor of Arts <i>ad eundem gradum</i>	20 00
Bachelor of Commerce	10 00
Master of Arts	20 00
Doctor of Philosophy	50 00
Doctor of Science	50 00
Extra Fee for degree <i>in absentia</i>	10 00

EXTRA-MURAL

The fees specified under the first two heads are payable upon registration; the examination fees are payable at the dates given in section 21 of REGULATIONS REGARDING EXTRA-MURAL WORK.

Registration:

Regular fee (covering twelve months)	\$10 00
Late registration	3 00
Change of work after registration	2 00
<i>Pro tanto</i> allowance of courses on work done elsewhere..	10 00

Tutorial:

Each course	10 00
Each half-course	5 00

Examination:

Each whole course, April or September	6 00
Each half-course, December, April, or September	3 00
Establishing new centre	10 00
Late application	3 00

The same fees are charged as in the case of intra-mural students.

SUMMER SCHOOL

Graduation:

Full Summer School attendance (all students)	\$30 00
Athletics	5 00
Summer School Association	2 25
Laboratory deposit as required of other intra-mural students.	

SCHOLARSHIPS, PRIZES, AND MEDALS

I—MATRICULATION SCHOLARSHIPS

For a list of Matriculation Scholarships and the conditions of award see the publication entitled REQUIREMENTS FOR MATRICULATION.

II—SCHOLARSHIPS IN ARTS

The Andrew Haydon Scholarship in Colonial History

Value \$50. Founded by Senator Andrew Haydon, M.A., '93, LL.B. Awarded on the results of the sessional examinations in the Pass class in Colonial History (History 3). Not to be held by any student unless in residence in the session following the award.

The W. M. O. Lochhead Scholarship in Economics

Value \$50. Founded by W. M. O. Lochhead, M.A., '98, Kitchener, Ont. The Scholarship will be awarded to the student taking the highest standing in the sessional examinations and classwork in Economics 1, provided he is in attendance in some faculty of the University in the following session.

The Adam Shortt Scholarship in Political Science

Value \$50. Founded by G. W. Mason, Esq., K.C., in honour of Dr. Adam Shortt, formerly Professor of Economics. Awarded to the student taking the highest standing in Economics 2, provided he is in attendance in the following session and is registered in advanced work in the Department of Political and Economic Science.

The P. D. Ross Scholarship in Commerce

Value \$150. Founded by P. D. Ross, LL.D., Ottawa. Awarded on the basis of the third year's work in the Commerce Courses, provided that the candidate is taking at least four full courses or their equivalent in the "Special Subjects" in Commerce and Administration and lacks not more than five other courses for graduation in Commerce. Tenable during the student's fourth year, if it is taken intra-murally.

The Sir Wilfrid Laurier Memorial Scholarship

Value \$100. Founded by the Ontario Women's Liberal Association for proficiency in French conversation: awarded only to a Canadian-born English-speaking student, a son or daughter of a British subject by birth or naturalization, not of French parentage, to perpetuate the memory of Sir Wilfrid Laurier.

Alexander Laird Scholarship in English 1

Value \$50. Founded in memory of the late Rev. Alexander Laird by his brothers and sisters and awarded annually to the student who makes the highest marks in English 1. Tenable only by a student in residence in the session following the award.

The Ann Eliza Stafford Scholarship in Biology

Value \$40. This Scholarship is not yet available but will later be provided by T. T. Bower, Esq., of Winnipeg, at which time the conditions of award will be announced.

The Maclellan Scholarship in Greek

Value \$25. Given by the late Hon. Jas. Maclellan, LL.D., Toronto, to encourage the study of Greek in the University. Awarded on the results of the April examinations in Greek 2 to the best student who is proceeding to the Honours course in Greek. Not to be held by any student unless in actual attendance, and not necessarily to be awarded unless a sufficient degree of merit is shown.

The N. F. Dupuis Scholarship in Mathematics

Value \$60. This is one of three scholarships founded by the graduates of the University in honour of the late Professor N. F. Dupuis on the completion of his forty-five years' service as Professor in the University. The scholarship is awarded to the student who takes the highest standing in Mathematics 1 in the April examinations. Tenable only by a student in residence in the session following the award.

The William Moffat Scholarship

Value \$50. Founded by Dr. William Moffat of Utica and awarded annually to the student making the highest standing in first year Chemistry. The award will be made on the combined results of class work and examination, and students in both Arts and Science are eligible. Tenable only by a student in residence in the session following the award.

Robert Bruce Scholarships

Under provisions of the will of the late Robert Bruce of Quebec the University has established a Scholarship worth about \$75 in each of the Faculties of Arts, Applied Science and Medicine. Until 1948 the award is limited to students of Scottish extraction.

The Scholarship in each Faculty will be awarded at the end of the first year to the student who has made the highest standing on the

regular examinations of that year. One-third of the value of each Scholarship will be paid to the winner in each of the second, third, and fourth years of his Course provided that he is in attendance in the Faculty in which the award was made.

The A. H. Jarvis Scholarships

For students from Glebe Collegiate Institute, Ottawa.

Two Scholarships of the value of \$25 each, the gift of A. H. Jarvis, Esq., of Ottawa, will be awarded under the following conditions: These Scholarships are open only to former students of the Glebe Collegiate Institute, Ottawa, who without some such assistance may not be able to carry on their academic courses. They may be awarded at Matriculation or in any year of an undergraduate course in any Faculty of the University. They shall be awarded preferably one to a man and the other to a woman student; but if in any year students of opposite sexes do not apply, both Scholarships may be awarded to men or to women. A Scholarship may be held in successive years by the same student and also in conjunction with any other Scholarship awarded by the University.

The Scholarships shall be awarded by the Senate of the University on the recommendation of a Committee of Award consisting of the Principal of the University, the Principal of Ottawa Collegiate Institute and the donor. Candidates shall make application for the same not later than May 15th.

Arts '15 Scholarships

(The capital sum is not yet fully collected)

Present value \$33. Founded as a memorial by the class of 1915. Awarded annually in turn by the Departments of English, Mathematics, and History to the student with highest standing in two Honour courses taken in the third year. Tenable by a student in residence in the following year. Awarded in History in 1931, in English in 1932, in Mathematics in 1933.

McIver Scholarship

Value \$250. Founded by J. B. McIver, former Treasurer of Queen's University. Awarded to the student standing highest in certain classes. The award in 1931 will be made under conditions to be announced at the beginning of the session. Tenable only by a student in residence the following session.

Welch Scholarship

Value \$125. Founded by Frederick Welch of Kingston. Awarded in the Faculty of Arts and open for competition only to the sons and daughters of non-commissioned officers and men who have served overseas in the late war, and of mechanics and labourers, which students shall at the time be bona fide residents of the City of Kingston; preference being had for the children of soldiers. Application for this Scholarship must be made to the Registrar not later than March 15 and must give evidence of eligibility in accordance with the terms of the will. The Scholarship will be awarded on the basis of the April examinations and will be tenable by a student in residence next session.

McLeod and McLean Scholarships

Founded by Jane McLeod. Two scholarships of \$42.00 each. Awarded each year to the two most promising and deserving students entering any Faculty of Queen's University from the Kingston Collegiate Institute.

Dr. William H Nichols Scholarship in Chemistry

Two Scholarships of the value of \$60 and \$40 will be awarded to the two students obtaining the highest mark during the year in Qualitative Analysis, Chemistry 2 (Arts) and Qualitative Analysis II (Applied Science). This year, only the first Scholarship of \$60 will be awarded.

III—SPECIAL SCHOLARSHIPS

A.—The Rhodes Scholarship

1. *General Regulations*:—A Rhodes Scholarship is tenable at the University of Oxford and may be held for three years. Since, however, the majority of Rhodes Scholars obtain standing which enables them to take a degree in two years, appointments are made for two years in the first instance, and a Rhodes Scholar who may wish to remain for a third year will be expected to present a definite plan of study for that period satisfactory to his College and to the Rhodes Trustees.

Rhodes Scholars may be allowed, if the conditions are approved by their own College and by the Oxford Secretary to the Rhodes Trustees, either to postpone their third year, returning to Oxford for it after a period of work in their own countries, or may spend their third year in post-graduate work at any university of Great Britain, and in special cases at any university on the continent of Europe, the overseas dominions, or in the United States, but not in the country of their origin.

The stipend of a Rhodes Scholar is fixed at £400 per year. At most Colleges, and for most men, this sum is not sufficient to meet a Rhodes Scholar's necessary expenses for Term-time and Vacations, and Scholars who can afford to supplement it by £50 per year from their own resources will find it advantageous to do so.

2. *Conditions of Eligibility*:—A candidate to be eligible must:

1. Be a British subject, with at least five years' domicile in Canada, and unmarried. He must have passed his nineteenth year, but not have passed his twenty-fifth birthday on October 1st of the year for which he is elected;

2. Have reached such a stage in his course at one of the Universities in Canada that he will have completed at least two years at the university in question by October 1st of the year for which he is elected.

Candidates may apply either for the province in which they have their ordinary private domicile, home or residence, or for any province in which they have received at least two years of their college education before applying.

In that section of the Will in which he defined the general type of scholar he desired, Mr. Rhodes wrote as follows:

"My desire being that the students who shall be elected to the Scholarships shall not be merely bookworms, I direct that in the election of a student to a Scholarship regard shall be had to:

1. his literary and scholastic attainments;

2. his fondness for and success in manly outdoor sports such as cricket, football and the like;

3. his qualities of manhood, truth, courage, devotion to duty, sympathy for and protection of the weak, kindliness, unselfishness and fellowship, and

4. his exhibitions during school days of moral force of character and of instincts to lead and to take an interest in his schoolmates for those latter attributes will be likely in after life to guide him to esteem the performance of public duty his highest aim.

Full particulars can be obtained from D. R. Michener, 372 Bay St., Toronto, Secretary of the Selection Committee for the Province of Ontario. Two Scholarships may be awarded annually in the provinces of Quebec and Ontario if qualified candidates appear.

Each candidate for a Scholarship is required to make application to the Secretary of the Committee of Selection of the province in which he wishes to compete, not later than November 10th. Application forms may be obtained from the Registrar's Office.

The following graduates of Queen's University have been awarded Rhodes Scholarships:

J. M. Macdonnell, M.A., 1905.
A. G. Cameron, B.A., 1906.
Norman S. Macdonnell, M.A., 1907.
Stanley Scott, B.A., 1911.
H. S. Smith, M.A., 1912.
A. G. Cumming, M.A., 1914
H. R. MacCallum, B.A., 1919.
K. E. Taylor, B.A., 1920.
A. D. Winspear, B.A., 1922
L. F. Kindle, B.A., 1925.
D. A. Skelton, B.A., 1926.

B—Royal Society of Canada Fellowships

Ten annual fellowships to be known as the Royal Society of Canada Fellowships, each of \$1500, and open on equal terms to men and women, have been endowed for a period of five years through the generosity of the Carnegie Corporation. They are tenable at institutions of learning or research, save in exceptional circumstances outside of Canada, and are available for advanced research in Literature, History, Anthropology, Sociology, Political Economy, or allied subjects, in French or English; and in Mathematics, Chemistry, Physics, Geology, Biology, or subjects associated with any of these sciences.

An applicant for a Fellowship should be a graduate of a Canadian university or college, or should have received an equivalent training in a Canadian institution possessing adequate facilities in his particular subject, and, except in special cases, should have the Master's degree or its equivalent or, preferably, have completed one or more year's work beyond that degree.

Applications, addressed to "The Secretary Royal Society of Canada Fellowships Board, Ottawa, Canada," should contain particulars of the candidate's age and place of birth, a full statement of his academic career, with copies of original papers and any other evidence of his ability or originality in his chosen field; also an indication of the particular work he proposes to undertake, at what institution, and under whose direction; and should be supported by recommendations from the head of the department of the institution in which the candidate has studied, and from the instructors under whom he has chiefly worked. All these papers should be in duplicate.

Further particulars may be obtained from the Registrar.

C—The Science Research Scholarship

This postgraduate scholarship of the annual value of £250 was founded by Her Majesty's Commissioners for the Exhibition of 1851, and is awarded to students who have given evidence of capacity for original research, and, except in very special circumstances, are under 26 years of age.

A given number of Scholarships are awarded annually to students in Canada recommended by the Universities approved by the Commission.

The nominee must be a British subject, must have been a *bona fide* student of Science for three years, must have been a student of this University for a full year immediately before his nomination, must be a student of this University at the time of his nomination (or he must have been a student at this University for a full year ending within twelve months prior to his nomination and since ceasing to be such student must have been engaged solely in scientific study), and must pledge himself not to hold, without special permission from the Commissioners, any position of emolument while holding the scholarship. He is recommended to the Commissioners by the Senate of the University. The scholarship may be held for two years, if the report of the first year's work be satisfactory to the Commissioners, and in exceptional cases for a third year. In the absence of special circumstances, the scholar will not be permitted to conduct his investigations in the country in which he received his scientific education. The particular investigation the student proposes to pursue must be stated before a scholarship can be awarded.

The scholarship is payable quarterly in advance and a grant of £25 will be paid if a satisfactory final report is presented within three months of the expiration of the scholarship. If in the opinion of the Commissioners it is necessary a scholar will receive an additional annual allowance not exceeding £30, and in some cases the fare from his University will be partially paid.

Recommendations must be received at the office of the Commissioners on or before June 1.

The following Science Research scholars have been appointed from Queen's University:

- Norman R. Carmichael, M.A., 1894.
- Thomas L. Walker, M.A., 1896.
- Frederick J. Pope, M.A., 1898.
- W. C. Baker, M.A., 1900.
- C. W. Dickson, M.A., 1901.

C. W. Knight, B.Sc., 1904.
F. H. McDougall, M.A., B.Sc., 1905.
Campbell Laidlaw, B.A., M.D., 1907.
N. L. Bowen, M.A., B.Sc., 1909.
Walter A. Bell, B.Sc., 1911.
John R. Tuttle, M.A., 1913.
Robert C. Cantelo, B.Sc., 1915.
Douglas G. H. Wright, B.Sc., 1921.
R. H. F. Manske, M.Sc., 1924.
Donald C. Rose, M.Sc., 1924.
H. M. Cave, M.A., 1926.
B. W. Sargent, M.A., 1928.
E. H. Charlesworth, M.A., 1931.

D—Arts Research Fellowships

The University has established two Fellowships of the value of \$500 and two of the value of \$250, open to men and women who have taken an Honour B.A. at Queen's or an equivalent degree elsewhere. At the discretion of the Committee on Arts Research one of the \$500 Fellowships may be awarded as a Travelling Fellowship, but with this exception the appointments are given only to those undertaking graduate studies at Queen's.

A student appointed to a Travelling Fellowship must submit and have approved a plan of study, and must present a report on his year's work within twelve months of his appointment.

A student appointed to a Fellowship within Queen's may be required by the Committee in consultation with the Department concerned, to undertake work of any of the following kinds: (a) Independent investigation, (b) Assistance in research work carried on by the Department, (c) Tutorial assistance not to exceed six hours a week.

The holder of a Fellowship may be required to report in lectures or in written form the results of any investigations carried on.

The holder of a Fellowship shall not be permitted to do any tutorial work except such as may be required of him by the Department in which his special studies lie. In no case shall tutorial work exceed six hours a week or entitle the Fellow to additional remuneration.

Applications must be sent to the Registrar, accompanied by evidence of eligibility, not later than April 1 of each year.

The Fellowships will be awarded only to candidates of distinction and promise.

E—The Western Ontario Graduate Fellowship in History

This Fellowship of the annual value of \$400 was created through the generous contribution by graduates of the University in London and Western Ontario of an amount creating an annual revenue of \$200, which was supplemented by an equal sum contributed by the University. It was established for the purpose of encouraging research in History and of providing junior assistants in the Department of History. It is awarded within the discretion of that Department to an advanced student of satisfactory academic standing in attendance at the University, and is subject to the conditions regarding tutorial work applicable to the Arts Research Fellowships.

F—The Sir James Aikins Fellowship in Canadian History

This Fellowship of the annual value of \$250, was created through the generosity of Sir James Aikins, K.C., LL.D., of Winnipeg. It will be awarded to the student obtaining the highest standing in the Honour courses in Canadian History, namely, History 20a, 21b, 30a, 31b, or such other courses as the Professor of Colonial and Canadian History shall determine.

The University will supplement this Fellowship by an amount which will bring the total sum to \$500. The Fellowship will be tenable only by students who return to the University for further work in Canadian History and will be subject to the conditions regarding tutorial work applicable to the Arts Research Fellowships.

G—Scholarship of the Canadian Federation of University Women

The scholarship of the Canadian Federation of University Women, value \$1,250, available for study or research work, is open to any woman holding a degree from a Canadian University. In general, preference will be given to those candidates who have completed at least one or two years of graduate study and have a definite research in preparation. The award is based on evidence of character and ability of the candidate and promise of success in the subject to which she is devoting herself.

For all information address the Convener of the Scholarship Committee, Dr. A. V. Douglas, Macdonald Physics Laboratory, McGill University, Montreal, P.Q. Applications must be received not later than February 1st.

Miss Mary White, M.A., held this Scholarship for the year 1930-1931.

H—Daughters of the Empire Post-graduate Scholarship (Overseas)

As part of their War Memorial the Imperial Order Daughters of the Empire offers in each province in Canada a scholarship for postgraduate study in Britain. The scholarship, of the value of \$1,600, is tenable for one year.

These scholarships are subject to the following conditions:

(1) Candidates may be men or women. They must be British subjects, with at least five years' residence in Canada, and unmarried. Except in the case of a returned soldier, sailor or airman, they must have passed their 19th but not their 27th birthday in October of the year in which they begin their work in Britain. In the case of a returned man the age limit is higher. Each candidate must either hold a degree from a University or College in the province in which he or she is making application, or be in his or her final year in a course proceeding to a degree.

(2) In each province a Committee of Selection will award the scholarship. Other things being equal, preference will be given to a returned man, his sister, son or daughter. The Committee will consider not only the academic record of the candidate, but his or her character, physical fitness, and promise.

(3) Applications for this scholarship should be sent, before October 6th, to the Provincial I.O.D.E. Educational Secretary, Y.W.C.A. Building, Main Street, Hamilton, Ontario, who will provide additional information about the scholarships.

The following graduates of Queen's University have been awarded Daughters of the Empire Overseas Scholarships:

Watson Kirkconnell, M.A., for the year 1921-1922.

Hartley Munro Thomas, B.A., for the year 1923-1924.

I—The Milton Hersey Fellowship in Chemistry

This Fellowship of the annual value of \$500, has been endowed by Milton L. Hersey, M.Sc., LL.D., of Montreal. It is open to graduates of all universities and technical colleges.

The holder of this Fellowship shall carry on research work for the whole session and embody the results in a thesis. The research may take the form either of independent investigation or of assistance in an investigation carried on by some department. The Fellow may be required to undertake tutorial work not to exceed six hours a week.

Applications for Fellowships will be received by the Registrar up to May 1. If no appointment is made by that date, further applications will be received up to September 2.

IV—PRIZES

In submitting literary articles or essays, candidates for prizes must observe the following regulations:

1. Competitive papers must be given to the Registrar not later than April 1.

2. Each paper is to bear a motto instead of the author's name, and must have attached to it a sealed envelope, bearing the same motto and containing a written declaration over the author's signature, to the effect that it is his unaided composition.

3. The envelope attached to successful papers shall be opened and the writer's name made known at the Convocation at the close of the session.

4. Prizes will be awarded only to those productions which the examiners consider to be of sufficient merit.

5. All successful productions shall be the property of the University, and shall be at the disposal of the Senate.

Curtis Memorial Foundation

Value about \$70. Founded in memory of the late J. T. Curtis of Ottawa. Awarded in October to a graduate of that year (April or September), who has completed the degree Course by extra-mural and Summer School work. The award is made by a special committee on the basis of scholastic ability, interest in athletics, and service to the Summer School.

Gowan Foundation No. I

Value \$25. Established by the late Sir James R. Gowan, K.C.M.G. Awarded for the best essay written under examination conditions in February of each year, on one of a list of subjects prescribed by the Department of Political and Economic Science.

Gowan Foundation No. II

Value \$25. Given by the late Sir James R. Gowan, K.C.M.G., for the best collection of Canadian Ferns and Fern Allies. The plants must be good specimens, well pressed and mounted on herbarium sheets of the standard size. The collection must be delivered before December 15.

Gowan Foundation No. III

Value \$25 in books. Established by the late Sir James R. Gowan, K.C.M.G. Awarded in Honours in Political Science.

Latin and Greek Composition Prizes

Two prizes, each of the value of \$10 in books, are offered for competition for the best composition in Latin and Greek respectively. The subject for the Latin Prose in session 1930-31 will be Mommsen, *History of Rome*, Book V, chapter X, the last paragraph beginning, "The constitutional struggle," down to "equally dangerous and impracticable."

Greek Prose, Grote: *History of Greece*, chapter LIII, Vol. VI, pages 370-373. (Everyman edition.) "The eighth year of the war . . . there can be little doubt that they would have acted with equal rigour."

McIlquham Foundation in English

Value \$27.50. Established by the parents of Mr. J. Max McIlquham, a student at Queen's University, 1912-15, who was killed on service overseas. Awarded for the best original poem, short story, or play, as the Department of English may decide from year to year. For 1931-32 the prize will be awarded for any one of the three.

James C. Rogers Prize in English

A prize of the value of \$5 in books. Awarded by James C. Rogers, B.A., '94, to the student obtaining the highest standing in English 2.

Mary Fraser McLennan Prize in Hebrew

A prize of the value of \$12, founded in memory of Mary Fraser McLennan, of Lancaster, by her sons. Awarded to the student obtaining the highest standing in Hebrew 1, provided he intends to pursue a Theological Course in Queen's Theological College.

The M. C. Cameron Prize in Gaelic

Value \$40. Founded by the late M. C. Cameron, M.P., Goderich. Awarded to the best Gaelic scholar, reader, and speaker. Application for examination should be submitted to the Registrar before January 15 in each year. Work prescribed: any 600 lines of Ossian's *Fingal*, or an equivalent amount of any other Gaelic literature selected by the candidate; Blackie's *Language and Literature of the Scottish Highlands*, Gaelic Grammar, translation at sight of Gaelic into English and English into Gaelic. This scholarship will not be awarded to any candidate who does not take at least fifty per cent. of the total number of marks in the examination.

Robert Bruce Bursaries

The will of the late Robert Bruce of Quebec provided for a sum of about \$100 a year to be given in Bursaries "to students of promising ability but straitened circumstances." Until 1948 the award is limited to students of Scottish extraction.

This sum will be disbursed annually to one or more students in the third or later years in any Faculty. The Registrar will receive applications up to December 21 in each year.

V.—MEDALS

A medal is awarded by the University under the conditions stated below to the candidate who makes the highest standing in Honours in each subject, provided such standing is not less than 75 per cent.

1. A graduate in Arts or a Tutor engaged in teaching the Honour work of a competitive subject is not eligible for a medal.

2. A candidate for a medal must have completed at least six courses in the competitive subject, of which two full courses must be taken in the session at the end of which the medal is awarded.

3. The award is made on the basis of the candidate's standing in four Honour courses following course 2.

Special Medal

The French Government offers annually a medal for the best essay in French on any subject connected with France. This essay, the subject of which must be approved of by the Department, must be handed in by the 1st of April. Open only to Honour students in French.

GENERAL REGULATIONS

All enquiries regarding regulations should be addressed to the Registrar.

Changes in regulations become effective immediately.

SPECIAL STUDENTS

1. Special students are those who do not intend to proceed to a degree. Such students may be admitted on satisfying the Faculty as to their ability to profit by the courses to which they seek admission.

2. Special students under twenty-one at the opening of the session are subject to all the regulations affecting regular students and to the following special regulations:—

(i) They shall not be granted admission for more than one session, though they may be readmitted to a succeeding session on a new application.

(ii) They shall not be allowed any supplemental examination but must withdraw from the University immediately if they fail to satisfy the Faculty at the regular December or April examinations.

(iii) Examinations passed by special students shall carry no credit towards Matriculation or towards a degree.

(iv) Attendance as a special student will not count as part of the attendance required for a degree.

3. Special students over twenty-one years of age at the opening of the session may by action of the Faculty be exempted from all regulations respecting attendance and work.

REGULATIONS REGARDING COURSES

In addition to the regulations below, see those under "Courses of Study leading to the Degree of B.A." Note particularly the provisions for Concentration, Distribution, and Sequence of Work.

Attendance and Work

4. Students are expected to be present at all lectures and laboratory periods and to hand in all essays and exercises when due. No one whose attendance or work falls below 80% of the total, whether on account of late registration, illness, or any other cause, will ordinarily be admitted to the final examinations in either December or April.

A careful record of absences based on monthly reports from Instructors is kept at the Dean's Office.

5. The December and April marks will be determined not merely by the results of examinations but also by the work of the whole term or session, including consideration of class tests, examinations, attendance, and progress.

6. The faculty may at any time either during the term or after the close of the term require any student to withdraw from the University whose conduct, attendance, work, or progress is deemed unsatisfactory.

Penalty for Failures and Low Grades

7. A student who has failed to pass the examination in any course must repeat the attendance and examination in that course in his next year at the University if he intends counting it towards a degree. If he should happen to register as an extra-mural student he must take this course and repeat the full work of the session.

8. A student who passes in only two whole courses or fewer out of four or five attempted in the final examinations will be considered to have failed in his year. Failure in the year will be determined by the results of the final examinations in December and April. A student who fails in his year will not have the privilege of the fall supplemental examinations.

9. Any student who twice in his Course fails in a year's work will be asked to withdraw from the University.

10. A student who fails in his year will retain credit only in those subjects in which he has obtained at least second division.

11. A student who makes less than 30% on a subject in the final examination in December or April will not be permitted to write on the fall supplemental examination in that subject unless he takes it again in the Summer School.

12. Students whose standing for the first term is regarded as unsatisfactory will be asked to discontinue their Course for the rest of the year.

Number of Courses in a Year

13. No student is allowed to take more than five courses in the academic year. See, however, section 9 under ADMISSION TO THE FACULTY OF ARTS.

14. An intra-mural student, unless excused for some special reason, must take five courses in each of his first and second years. In no case will such a student be allowed to take fewer than three courses in his first or second year. In exceptional circumstances, he may, however, with the consent of the Board of Studies, take three or four courses in the winter session and the rest extra-murally in the summer, provided that he attends the Summer School.

15. Any student who without special permission drops a course in which he is registered will be regarded as having failed in that course.

Preparatory Courses

16. Students with full matriculation who desire to begin work in Greek, German, or Spanish may count course A in one of these subjects towards a Pass degree. A student wishing to take Honours in one of the above subjects will be permitted to take Course I during the summer after taking course A in the winter, but course A cannot be counted as a course towards his degree.

17. Courses A and 1 may not be substituted for courses 1 and 2 where the latter are definitely prescribed.

REGULATIONS REGARDING EXAMINATIONS

(See also Regulations 5 to 12)

Mid-Term Examinations

18. In every class numbered A, 1, 2, and in History 1, 2, and 3, there will be an hour examination arranged by schedule at the regular class hour about four weeks after the opening of the session.

19. Other hour examinations in the regular class hour may be held by any instructor whenever he thinks it advisable.

December Examinations

20. Mid-session examinations are held in all subjects, including courses for private work, during the last week before the Christmas holidays. Such examinations are final in half-courses of the first term. In courses that continue throughout the session credit not exceeding fifty per cent. of the final marks may be assigned to the work of the first term. Any student not writing on any mid-year examination is regarded as having failed and will be given a mark of zero.

The attention of students is specially called to Regulations 5 and 8.

April Examinations

21. Final examinations are held in April. Intra-mural students must take these examinations in all the courses and half-courses in which they are registered in the second term. Permission to postpone until September examinations in courses numbered under 10 may be obtained in special cases but only upon the recommendation of the Professors concerned. Honour examinations may not be postponed. Examinations will be held in the Reading courses of all subjects. Examination Time-tables are issued each year in March.

The attention of students is specially called to Regulations 5, 8 and 10.

September Examinations

22. Supplemental examinations are held in September in all courses numbered under 10 and in such Honour courses as may be offered in the summer. No September supplemental examinations will be given in courses beyond the first three courses of a Major or Minor subject for the Honours B.A. degree, but September papers will be set in Reading courses 1 and 2 for those who do this reading during the summer.

23. No student is permitted to take a Supplemental examination in any course or half-course in which he had made less than thirty per cent. at the previous examination.

24. At the specified date (see pages 5 and 6) before the September examinations begin, each candidate must apply to the Registrar for permission to write on the subjects in which he desires to be examined. The application should be on printed forms supplied for the purpose and should be accompanied by the proper fees. See FEES.

Special Examinations

25. Students who for any reason fail to take an examination on the appointed date may be required to take a special examination. The fee is five dollars for one special examination or ten dollars for two or more special examinations.

Admission to Examinations

(See also Regulations 4, 21, 22)

26. Students will not be permitted to write on examinations unless they have registered on the prescribed date within the academic year in which they present themselves. (See REGISTRATION.) But graduates not in attendance who wish to take examinations merely to raise their standing in subjects passed may delay their registration till March 1.

27. No candidate will be admitted to the examination hall later than thirty minutes after the beginning of the examination.

28. No candidate will be permitted to take any books or papers into the examination hall except by express direction of the examiner.

Determination of Standing

29. In determining a student's standing at a sessional examination the Departments will take into account the entire class record. See Regulation 4.

30. The following percentages are required for the various grades of Pass and Honour standing in all courses:

PASS STANDING

(Applying only to courses numbered under 10)

<i>Division I</i>	75 per cent. and over.
<i>Division II</i>	62-74 per cent.
<i>Division III</i>	50-61 per cent.

HONOUR STANDING

(Applying to all courses numbered 10 or over)

<i>Class I</i>	75 per cent. and over.
<i>Class II</i>	66 to 74 per cent.
<i>Class III</i>	60-65 per cent.
<i>Credit on a Pass Course</i>	50-60 per cent.

COURSES OF STUDY LEADING TO THE DEGREE OF B.A.

GENERAL EXPLANATIONS

Pass and Honours Courses

The word "Course," when printed with an initial capital, is used to indicate a programme of work leading to a degree or certificate.

A candidate for the degree of Bachelor of Arts may take a Pass Course or an Honours Course. The latter requires greater specialisation and higher standards in the work of the two main subjects. Details are given below under REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS.

Courses and Half-Courses

The word "course," printed with an initial small letter, indicates a unit of work occupying, as a rule, three hours a week throughout the session. A "half-course," on the other hand, usually occupies only one term, though occasionally it may run through the session.

Two half-courses are equivalent to a course, and when the amount of work to be done is defined in courses, it is to be understood that an equivalent in courses and half-courses may be offered.

Numbering of Courses and Half-Courses

Preparatory courses in the languages are designated by the letter A. See GENERAL REGULATIONS. Other courses are numbered with Arabic numerals (Latin 1, Greek 2). Half-courses have in addition to the numeral the letter *a* or *b*, according as they are offered in the first or second term. A half-course running throughout the session is marked *hf*. (Chemistry 133hf.) Courses in advanced work marked "t" are two-hour courses extending throughout the year.

The fundamental courses in each subject are numbered 1 and 2 (History 1, 2 or 3) and must be taken by all proceeding to advanced work. Other courses numbered under 10 are for Pass students only. Courses numbered 10 and upward are Honours courses, though in most departments some of them are open to Pass students.

SYNOPSIS OF COURSES

The following Courses of Study are outlined in the succeeding pages:

Pass and Honours Courses leading to the degree of B.A.

Course for Teachers' Certificates in the Province of Ontario.

Courses in Commerce and Administration.

Combined Course in Arts and Applied Science.

Combined Course in Arts and Theology.

A candidate is subject to changes in Registration or Courses made after his first registration unless in the judgment of the Board of Studies undue hardship is involved.

All enquiries regarding Regulations should be addressed to the Registrar.

REQUIREMENT FOR A PASS B.A. DEGREE

A candidate for a Pass degree must pass twenty classes, chosen in accordance with the three regulations given below, and must make a standing of second division or over in at least ten.

A. The twenty classes offered for a degree must include the following nine:

English 1, English 2,

Latin 1

Any *two* chosen from Greek 1, German 1, French 1, Latin 2,
Greek 2, German 2, French 2,

Either Philosophy 1 or Greek and Roman Civilization,

Any *one* chosen from History 1, History 2, History 3, Economics 1, Economics 2,

Mathematics 1,

Any *one* chosen from Physics 1, Chemistry 1, Biology 1, Biology 2, Geology 1, Mineralogy 1.

- B. A candidate must so arrange his work as to include at least three classes in each of three subjects.
- C. Additional classes to make a total of twenty may be freely chosen, subject to the regulations regarding prerequisites, from those listed under the heading "Details of Courses of Instruction," pages 83 to 132.

HONOURS COURSES LEADING TO THE DEGREE OF BACHELOR OF ARTS

A student who has already begun an Honours Course with the University and who continues it without break, may complete it under the regulations of the calendar under which he entered, or may transfer to the new Honours Course.

I. Admission to Honours

(a) At the end of the second year (from Pass Matriculation) each candidate for an Honours Course shall apply through the Registrar to the Departments concerned for permission to proceed in his Major and Minor subjects. The Departments shall not accept him unless in his work during his first two years he has shown promise of ability to qualify for Honours by obtaining at least 62% in each special subject and by reaching a satisfactory standard in his other work. Candidates who have obtained a lower grade shall be accepted only by the Committee of Departments.

(b) At the end of the third year and again at the end of the fourth year each candidate for Honours shall be considered by the Committee of Departments with reference to his fitness to proceed and if his work is not satisfactory he shall be required to revert to a Pass Course.

II. Weight of Work

The amount of work shall be twenty-three three-hour courses, or equivalent:

(a) Twenty Lecture courses made up as follows:

- (1) Nine courses to constitute a Major, of which seven shall be in one subject and the remaining two, at the discretion of the Major Department, shall be in the same subject or shall be supporting work in other subjects. For the purpose of this regulation, Italian 1 shall be regarded as a course in Spanish and Geology and Mineralogy shall be regarded as a single Department.

If Pass courses from another Department are prescribed as part of the Major group, the candidate must make second division in them; if advanced courses from another Department are approved, the candidate will be exempt from the regulations regarding standing in earlier work in the subject.

- (2) Five courses to constitute a Minor. These shall ordinarily be in one subject, but a candidate offering a Minor in Science or in Political and Economic Science may, with the consent of the Major Department, split the Minor between two subjects.
- (3) Six general courses outside of the Major and Minor groups. These must include such compulsory classes specified below under III (a) as are not included in the Major and Minor groups, and such other classes, freely chosen, as may be required to bring the number of general courses up to six.
- (b) Three courses in Directed Reading. Each of these in weight of work shall be the equivalent of a three-hour lecture course and the content will be determined by the Major Department.

Field work or research, approved by the Major Department, may be substituted for one of the Reading courses but no candidate shall be required to make such substitution.

III. Compulsory Courses

- (a) The following classes, except as provided in (1) and (2), must be included among Major, Minor, and general courses:

English 1, 2.

Latin 1. But if the Major subject is Mathematics or a Science, German 1 may be substituted for Latin 1. If the candidate has had no German he may take German A in the winter and German 1 in the following summer, and in that case German A will not count towards a degree. Candidates are warned that if they revert to a Pass Course they must qualify in Latin 1.

French 1 or German 1 or Greek 1.

Philosophy 1.

Mathematics 1.

A science course.

- (1) Candidates whose special subjects are Economics and History may omit one of Latin 1, Philosophy 1, Mathematics 1, according as the Major Department may decide.
- (2) Candidates whose subjects of Honour Matriculation were not chosen with reference to the Course they intended to follow, may, in case of hardship, be given relief by the Board of Studies.

- (b) Other compulsory courses may be required by the Major Department, but in that case they must be counted as part of the Major or Minor as provided under II.

IV. Length of Course

The Course for the degree of B.A. with Honours normally covers five years from Pass Matriculation or four years from Honour Matriculation in five full subjects. It is possible, however, for candidates of exceptional ability to save a year by taking five regular lecture courses or equivalent in hours in each of four years and by doing the Directed Reading in the third and fourth years and in the intervening summer.

The following plans show how the work may be distributed according as a five or a four year programme is followed. A candidate specializing in Philosophy or Economics, which are not offered till the second year, will complete his first year's programme with general courses so as to leave room in the second and third years for five courses in the Major or three courses in the Minor.

Suggested Plan for a Five Year Course

(in terms of 3-hour Units)

<i>1st year</i>	<i>2nd year</i>	<i>3rd year</i>	<i>4th year</i>	<i>5th year</i>
major 1	major 2, 3	major 4, 5	major 6, 7	major 8, 9
minor 1	minor 2	minor 3	minor 4	minor 5
3 general courses	2 general courses	1 general course	Directed Reading 2	Directed Reading 3
		Directed Reading 1		

Suggested Plan for a Four Year Course

(in terms of 3-hour Units)

Only candidates of exceptional ability and industry will be permitted to proceed beyond the second year on a Four Year Plan.

<i>1st year</i>	<i>2nd year</i>	<i>3rd year</i>	Summer bet'n <i>3rd & 4th yrs.</i>	<i>4th year</i>
major 1	major 2, 3	major 4, 5, 6	Directed	major 7, 8, 9
minor 1	minor 2	minor 3	Reading 2	minor 4, 5
3 general courses	2 general courses	1 general course		Directed Reading 3
		Directed Reading 1		

On account of the many changes in classes and hours it has been found impossible to include in this calendar the time-table of courses for next year, but a time-table with other information will be issued during the summer.

No Course for General Honours in Science for Teachers is as yet outlined under the new scheme, but it is hoped to include this in the syllabus to be issued shortly.

GENERAL EXAMINATIONS

Candidates for an Honours Degree must at the end of their final year take in addition to the regular sessional examinations a general examination covering the whole field of work in their main subject. This examination is not merely a review of courses passed; it is intended to test the candidate's knowledge of a subject. Periods or subjects not dealt with in the regular work must be covered by private study. The results of the general examination will be an important element in the determination of final standing. Five papers will be set to test the candidate's knowledge of the Major subject including the Reading courses. One of the five may be practical or oral. A Pass degree will be awarded to those who fall below the level of second class Honours but reach a standard at least equivalent to that of the Pass degree.

Italian, Spanish, Scandinavian, and Biblical Language and Literature may be counted towards a degree as optional subjects, but of these four only Spanish may be taken as an Honour subject.

Spanish and Italian may not both be counted towards a degree, but students taking Honours in Spanish may substitute Italian for one of their lecture courses in Spanish.

Sequence of Work in all Courses

In each of his second, third, and fourth years a student must have his programme of work approved by the Board of Studies.

The courses in each subject must be taken in the order prescribed in the Departmental announcements. Ordinarily course 1 is pre-requisite to course 2 and course 2 is pre-requisite to all other courses, but slight variations from this order are permitted by the Departments of History, Economics, Philosophy, Mathematics, and Biology.

First Year

A student entering with Pass Matriculation shall take the following five courses in his first year:

1. Latin 1 (But those choosing their Honours subjects from the sciences must include a science instead of Latin 1.
2. Greek 1, German 1, or French 1
3. English 1
4. Mathematics 1

5. A Science. (Those, however, who choose a third foreign language as one of the two Honours subjects must begin it at this point and postpone the science course).

No course in Economics or Philosophy may be taken in first year. History, however, may be begun if it is one of the main subjects of the course and the science postponed.

Students requiring for any purpose a certificate of having completed the first year's work must take the following five courses: (1) Latin 1; (2) Greek 1, German 1, French 1, or Spanish 1; (3) English 1; (4) Mathematics 1; (5) Physics 1 or Chemistry 1, or another of the courses named in (2).

Students without matriculation in Latin, French, or Mathematics must pass the regular matriculation examinations before being admitted to course 1 in these subjects.

Second Year

A student in his second year shall take five courses; he shall continue at least two subjects of his first year and include at least one subject from Economics, Philosophy, History.

COURSES FOR TEACHERS' CERTIFICATES IN THE PROVINCE OF ONTARIO

(Agreement of 1920)

I. Ordinary Certificates

The academic standing for admission to the professional Course leading to an ordinary High School Assistant's certificate is the degree of Bachelor or Master of Arts, Bachelor or Master of Science, or Bachelor of Commerce, from a British University, based upon Courses approved by the Minister of Education.

Each applicant must have Honour Matriculation standing in English, History, and Mathematics, or equivalent, if his degree Course did not include these subjects.

II. Specialists' Certificates

The new Honours Courses have not yet been approved by the Department of Education but it is hoped that this will be arranged before the opening of session.

Subject to the conditions specified below, the academic standing required of Specialists may be obtained by completing a course in Arts with Honours in one of the following groups:

Greek and Latin	French and German or Spanish
English and History	Mathematics and Physics
English and French	Science
English and German or Spanish	B.Com. Course (Specialist's Option)

Candidates for a Specialist's certificate in Science, should take the regular Honours Course in two of Physics, Chemistry, and Biology. The course for General Honours in Science for Teachers has not yet been arranged under the new regulations but will be outlined before the opening of next session.

1. The Course shall extend over at least five years from Pass Matriculation or, as may be determined by the regulations of the University concerned, over four years from Honour Matriculation.

2. Candidates shall attend for at least two full academic years. Under the direction of the University they may substitute for one of those years at least two summer sessions.

3. The standard for each year shall be that prescribed by the University for candidates taking Honours Courses. A candidate who has completed the requirements for an Honours degree from the University but has not complied with the regulations as to time required for Specialist's standing may receive the Honours B.A. and later complete any further work required for the Specialist certificate.

A graduate of the Faculty of Applied Science may obtain the standing required for Specialists by taking certain additional courses as stated below.

III. Specialists' Certificates for Graduates in Applied Science

1. IN MATHEMATICS AND PHYSICS

A degree in Applied Science in one of the Courses of Mining and Metallurgical Engineering, Chemistry, Mineralogy and Geology, Chemical and Metallurgical Engineering, Civil Engineering, Mechanical Engineering, or Electrical Engineering with a subsequent standing of at least 60 per cent. in each of the following courses and an average of 66 per cent. in the work of each subject:

Mathematics 10a, 11b, 12a, 13a, 15a, 16b.

Physics 10b, 12a, 13b, 14a.

credit towards these being given when equivalent subjects have been satisfactorily taken in course.

or,

A degree in Applied Science in the Department of Physics with subsequent standing of at least 60 per cent. in each of the following courses and an average of 66 per cent. in the work of each subject:

Mathematics 10a, 11b, 12a, 13a, 15a, 16b, and another advanced full course.

Physics 10b, 12a, 13b, 14a.

credit towards these being given when equivalent subjects have been satisfactorily taken in course.

2. FOR SPECIALIST STANDING IN SCIENCE

A degree in Applied Science in one of the Departments of Mining and Metallurgical Engineering, Chemistry, Mineralogy, Geology, Chemical and Metallurgical Engineering, Civil Engineering, Mechanical Engineering, Electrical Engineering, or Physics, with a subsequent standing of at least 60 per cent. in each of the following courses, and an average of 66 per cent. in the work of each subject in courses numbered 10 or over:

Biology 1, 2, 11, 16,

Physics 11, or 14a and 13b.

Geology 1,

Mineralogy 1,

Chemistry 2, and one of 12, 13, 14, 17 not previously taken. credit towards these being given when equivalent subjects have been satisfactorily taken in course.

It is understood that according to the regulations of the Department of Education professional certificates to teach in High School and Collegiate Institutes are given only to persons who have credit for Upper School work in English, Mathematics, and History, or the equivalent of these in University work.

III. Inspectors' Certificates

The academic requirements for a Public School Inspector's certificate are as follows:

(1) An Honour degree in Arts or the degree of B.Com. (Commercial Specialists' Option) in accordance with the present agreement as prescribed for Specialist qualifications, or

(2) A Pass degree in Arts with a standard of 66% in any five courses beyond course 1, and second division in any other five courses, as set forth in the Calendar of Queen's University for the academic year, 1931-32.

(3) A candidate shall extend his Course over at least four years from Junior Matriculation and he shall attend the University classes

(i) for at least two complete sessions approved by the University, or (ii) for at least one complete session, and two complete sessions of the Summer School, or (iii) for at least four complete sessions of the Summer School, or the equivalent thereof, with the supervision prescribed by the scheme agreed upon between the Department and the University.

COURSES IN COMMERCE AND ADMINISTRATION

These Courses, leading to the degree of Bachelor of Commerce, were established in 1919 to assist in meeting the need which exists in Canada of more systematic training for business and public service.

The Courses in Banking established in 1914 by Queen's University in co-operation with the Canadian Bankers' Association will hereafter be continued as part of the Courses in Commerce and Administration.

For further particulars consult ANNOUNCEMENT OF THE COURSES IN COMMERCE AND ADMINISTRATION, of which copies may be obtained from the Registrar.

COMBINED COURSE IN ARTS AND APPLIED SCIENCE

A course leading to the Degree of B.A. and B.Sc. in six years.

Students taking this Course are required to have Arts Matriculation and to register for the first two years in Arts alone and to pay the full Arts fees; to register for the third and fourth years in both Arts and Applied Science, paying the registration fees only in Arts and the Applied Science fees in full, including those of the Engineering Society; and to register for the last two years in Applied Science only, paying full fees. Arts classes are subject to the regulations in the Arts Calendar and Applied Science classes to the regulations in the Applied Science Calendar; but the regulations of the Faculty of Applied Science concerning students who fail to pass their classes will apply to those Courses throughout.

The courses must be taken in the order in which they are laid down in the Calendar.

The degree of B.A. will be conferred on candidates who complete four years' work with a minimum standing of fifty per cent. and sixty-two per cent. in half their classes.

Subjects numbered in Roman numerals are taken in the Faculty of Applied Science.

First Year

1. English 1
2. French 1 or German 1
3. Mathematics 1
4. Mathematics IV (Science)
5. Astronomy I (Science)
6. Physics 1
7. Chemistry 1

Second Year

1. English 2
2. French 2 or German 2
3. Philosophy 1 or 2
4. { Two of History 1, 2, 3,
5. { Economics 2

Third Year

1. Course from Group I.
2. Course in a subject previously taken, but not covered by the later courses in Science.
3. Mathematics I, II and III.
4. Surveying I.
5. Drawing I.
6. Projections I.

Fourth, Fifth, and Sixth Years

The fourth, fifth, and sixth years are the same as the second, third, and fourth years of the B.Sc. Course. See the Calendar of the Faculty of Applied Science.

COMBINED COURSE IN ARTS AND THEOLOGY LEADING TO THE PASS B.A. DEGREE IN FIVE YEARS

Queen's University and Queen's Theological College join in offering a Combined Course in Arts and Theology. The complete Course covers six years. The first, second and third years are entirely within the Faculty of Arts and the candidate must pay full Arts fees. The fourth year consists of one Arts class, for which a fee of \$25 is charged, and of the first year in Theology. The fifth and sixth years of the Combined Course are the second and third years in Theology.

The degree of Bachelor of Arts is awarded at the end of the fifth year to candidates who have passed in all their subjects and made second divisions in at least half the classes offered for the B.A. degree. The subjects covered are given below:

First Year

1. English 1
2. Greek A
3. Latin 1
4. Mathematics 1
5. Science

Second Year

1. English 2
2. Greek 1
3. Hebrew 1
4. Science
5. Philosophy 1 or 2

Third Year

1. Option
2. Greek 2
3. Hebrew 2
4. Option
5. Option

Fourth Year

1. An Arts course
2. Church History
3. Systematic Theology
4. O. T. Criticism
5. N. T. Criticism
6. Practical Theology and Public Speaking.

Fifth Year

1. Church History
2. Systematic Theology
3. O. T. Criticism
4. N. T. Criticism
5. Practical Theology

If a student has Matriculation in Greek he will take Greek 1 and 2 in the first two years, and a freely chosen class in place of Greek 2 in the third year.

In choosing his options a student must plan to complete three courses in each of two subjects by the end of the fourth year.

DETAILS OF COURSES OF INSTRUCTION

LATIN LANGUAGE AND LITERATURE

PROFESSOR—Richard Orlando Jolliffe, Ph.D.

PROFESSOR IN CLASSICS—H. L. Tracy, B.A., Ph.D.

ASSISTANT PROFESSOR OF CLASSICS—L. E. Law, B.A.

LECTURER IN CLASSICS—Mary L. Macdonnell, M.A.

LECTURER IN LATIN—W. H. Showman, M.A.

TUTORS—Catherine E. O'Brien, B.A., Alice E. Babcook.

GENERAL NOTICE TO STUDENTS IN LATIN

A good Latin dictionary is an absolute necessity. For the Pass classes, Lewis' *Latin Dictionary for Schools* (Oxford Press) is recommended, or Lewis' *Elementary Latin Dictionary* (Oxford Press). Honours students must provide themselves with Lewis and Short's *Latin Dictionary* (Oxford Press). All students should own and use a Classical Dictionary—Smith's *Smaller Classical Dictionary* (Everyman's Library) is convenient and cheap—and a Classical Atlas (*Atlas of Ancient and Classical Geography* in Everyman's Library or Murray's *Classical Atlas*). A Latin grammar is indispensable. In all Pass classes Bennett's *Latin Grammar* (Allyn and Bacon) will be used. Honours students will require Allen and Greenough's *New Latin Grammar* (Ginn and Co.). Gow's *Companion to School Classics* (Macmillan) is a useful general handbook.

SIGHT TRANSLATION. *Ability to translate Latin at sight will be tested on every examination paper in authors. The best preparation for translation at sight consists in the careful and honest reading of the prescribed texts without the aid of a translation.*

REGULATIONS

1. Latin 1 is a prerequisite of Latin 2, and Latin 2 of all other courses.

2. A student taking Latin as one of his main subjects on a Pass Course will take Latin 1, 2, and 3.

3. For Honours in Latin under the old Course a student will take courses 1, 2, 10, and three or four courses numbered 11 to 22; of these 16 and 22 are compulsory. Each of the latter will count as two half-courses under the old Course. Honours students may take Latin 2 and 10 in the same session.

4. For Honours in Latin under the new Course, a student must take:

- (a) Nine courses for Major as follows:
Seven courses in Latin, 1, 2, 10, 11, 16, 21, 22, with two supporting courses; (when Greek is the Minor, supporting courses will be Greek 10 and 11; when English is the Minor supporting courses will be an Honours course in History and French 1 or German 1; when French is the Minor, supporting courses will be an Honours course in History and an Honours course in English).
- (b) Three Reading courses in Latin, R 1, R 2, R 3.
- (c) Five courses for Minor in Greek, French, English or Philosophy.
- (d) Six compulsory general courses to complete the work for degree, as follows:
With Minor in Greek: English 1, 2, Philosophy 1, Mathematics 1, one science, one free option.
With Minor in French: English 1, 2, Philosophy 1, Mathematics 1, one science, one free option.
With Minor in English: French 1 or German 1 or Greek 1, Philosophy 1, Mathematics 1, one science, two free options.
With Minor in Philosophy: English 1, 2, French 1 or German 1 or Greek 1, Mathematics 1, one science, one free option.

COURSES OF INSTRUCTION

LATIN 1. TRANSLATION AND INTERPRETATION of Prescribed Texts, Sight Translation, Grammar and Prose Composition.

Note.—The examination will be divided into three sections corresponding to the above. Students must satisfy the examiners in each of the three sections of the paper.

Prescribed Texts:

Petrie, *A Latin Reader with an Introduction to Roman History* (Oxford Press) 1932-33; Selections from Caesar, Cicero, Pliny, Sallust, Livy, Catullus, Virgil, Horace.

Sight Translation of passages in prose or poetry similar in style and difficulty to the prescribed texts.

Bennett, *Latin Grammar* (Allyn and Bacon).

Latin Prose Composition: Weekly exercises will be assigned based on a syllabus of Latin Prose Composition prepared by the department and obtainable from the Technical Supplies department.

An extra tutorial period will be given for the benefit of students whose class-work is unsatisfactory.

LATIN 2. TRANSLATION AND INTERPRETATION of Prescribed Texts, Sight Translation, Grammar and Prose Composition.

Note.—The examination will be divided into three sections corresponding to the above. Students must satisfy the examiners in each of the three sections of the paper.

Prescribed Texts:

Cicero, in *C. Verrem Actio Prima; pro Archia; Philippica IX* (*Select Orations of Cicero*: King, Oxford Univ. Press).

Virgil, Selections from the *Eclogues, Georgics* and *Æneid*.

P. Vergili Maronis Opera (Sidgwick, Cambridge University Press, 2 vols.).

Bennett, *Latin Grammar* (Allyn and Bacon).

Bradley-Arnold, *Latin Prose Composition* (London; Longmans, Green and Co.) 1932-33.

Sight Translation of passages in prose or poetry similar in style and difficulty to the prescribed texts.

Latin Prose Composition: Weekly exercises will be assigned, based on specified portions of Latin Grammar.

LATIN 3. HORACE AND LIVY.

Horace: *Odes* (*Horace, The Odes and Epodes*, edited by Shorey and Laing; B. H. Sanborn & Co., Boston).

Livy: Book I (Edwards; Cambridge University Press).

Book II (Conway; Cambridge University Press).

Bradley-Arnold, *Latin Prose Composition* (London; Longmans, Green and Co.).

LATIN 10. Foundation course for further Honours Courses in Latin. Elementary morphology and syntax.

Latin Prose Composition.

Cicero: in *Catilinam*.

Sallust: *Catiline*.

Virgil: *Æneid* vi.

LATIN 11. Plautus: *Captivi*.

Terence: *Adelphi*.

Cicero: *de Officiis*.

Tacitus: *Agricola*.

LATIN 16. Catullus.

Horace: *Odes*.

Caesar: *de Bello Gallico*.

Latin Prose Composition.

LATIN 21. Virgil: *Æneid*.

Lucretius.

Cicero: *Letters*.

- LATIN 22. Horace: *Satires and Epistles*.
Juvenal.
Tacitus: *Annals* i-iv.
Latin Prose Composition.

READING COURSES IN LATIN:

- R 1: Roman political and constitutional history to 133 B.C.
Livy i, v, xxi, xxii .
R 2: Roman History from 133 B.C. to 31 B.C.
Caesar: *de Bello Civili*.
Cicero: *Philippic* ii.
R 3: Roman History from 31 B.C. to 69 A.D.
Tacitus, *Annals* xiii-xvi.

GREEK LANGUAGE AND LITERATURE

PROFESSOR—T. Callander, M.A.

PROFESSOR IN CLASSICS—H. L. Tracy, B.A., Ph.D.

ASSISTANT PROFESSOR IN CLASSICS—L. E. Law, B.A.

LECTURERS IN CLASSICS—Mary L. Macdonnell, M.A.

J. D. Jefferis, M.A.

GENERAL NOTICE TO STUDENTS IN GREEK

The *Greek Dictionary* recommended is by Liddell and Scott (Abridged Edition). A *Greek Grammar*, preferably Goodwin's or Smyth's, is also necessary. Murray's *Classical Atlas*, Jebb's *Primer of Greek Literature*, or Norwood's *Writers of Greece*, Maisch's *Greek Antiquities*, and Bury's *History of Greece* are indispensable.

PROSE COMPOSITION. Students taking Greek as their Major or Minor, and Honour students in their first year work, will use Sidgwick's *Greek Prose Composition*.

REGULATIONS

Greek A may be counted towards a degree under conditions specified in section 16 of GENERAL REGULATIONS. Students who enter the University without matriculation in Greek, and yet desire to specialize in this subject, may complete their programme of work in the usual time. Such students should take Greek A in their first session, and Greek 1 in the summer immediately following. Only one of these two courses may be counted towards the total number of courses required for a degree.

Students offering Greek as one of the main subjects on a Pass Course will take Greek 1, 2, and 10, or A, 1 and 2 if they have not matriculated in Greek.

For Honours in Greek under the old Course a student must take from five to seven courses; each of the courses listed below is equivalent to two half-courses as listed in former calendars.

Honours students should take in the same session Greek 2 and 10.

For Honours in Greek under the new Course, a student must take:

(a) Nine courses for Major as follows:

Seven courses in Greek 1, 2, 10, 11, 12, 13, 14, with two supporting courses, Latin 11 and 13 if Latin is Minor, or Latin 2 and Politics 2 if Philosophy is Minor.

- (b) Three Reading courses in Greek, R 1, R 2, R 3.
- (c) Five courses for Minor in Latin or Philosophy.
- (d) Six compulsory general courses to complete the work for degree:
 With Latin as Minor: English 1, 2, Philosophy 1, Mathematics 1, one science, one free option (Greek and Roman Civilization is recommended).
 With Philosophy as Minor: English 1, 2, Latin 1, Mathematics 1, one science, one free option.

COURSES OF INSTRUCTION

GREEK A. FOR BEGINNERS.

The text-book is White, *First Greek Book* (Ginn and Co.). The object of the course is to prepare students for entering the regular classes in Greek, and to cover an amount of work as nearly as possible the equivalent of Matriculation Greek. The elements of the language will be the chief concern; some continuous reading, however, will also be done.

GREEK 1.

1. TEXTS FOR SPECIAL STUDY:

Freeman and Lowe, *Greek Reader* (Oxford Press).

The Iliad, I-XII, Leaf and Bayfield (Macmillan). Selections.

The Acts of the Apostles, chapters i-v. Westcott and Hort's *New Testament*.

2. UNSEEN TRANSLATION.

3. COMPOSITION.

Pitman, *Greek Prose Composition*.

4. GRAMMAR.

Goodwin, *Greek Grammar*.

5. GENERAL READING:

Bury, *History of Greece*, chapters i-v.

Jebb, *Primer of Greek Literature and Introduction to Homer*.

GREEK 2.

1. TEXTS FOR SPECIAL STUDY:

Euripides, *Alcestis*, ed. Earle (Macmillan).

Plato, *Apology*, ed. Stock (Oxford Press).

The Epistle to the Galatians, Williams (Cambridge Press).

2. UNSEEN TRANSLATION.

3. COMPOSITION.

North and Hillard, *Greek Prose Composition* (Rivington's).

4. GRAMMAR.

Goodwin, *Greek Grammar*.

5. GENERAL READING:

Sheppard, *Greek Tragedy* (Cambridge Press).

Maisch, *Greek Antiquities*.

Bury, *History of Greece*, chapters vi-xi. Every member of the class in Greek 2 should make himself familiar with the outlines of Greek History at the beginning of his course. Lectures on this subject will be given during the session.

GREEK 10. Plutarch, *Themistocles*.
Homer, *Odyssey* VII, IX, XI.

GREEK 11. Introduction to Comparative Grammar and Syntax of Latin and Greek.

GREEK 12. Herodotus, VIII, Thucydides I, II.
Aristophanes, *Acharnians*, *Knights*.
Lectures on Fifth Century History.
Greek Prose.

GREEK 13. Demosthenes, *Olynthiacs*.
Sophocles, *Antigone*.
Plato, *Republic* I-IV.

GREEK 14. Plato, *Gorgias*.
Aristotle, *Ethics* I-IV, X.
Aeschylus, *Agamemnon*.
Greek Prose.

READING COURSES IN GREEK:

- R 1. History from 500 to 431 B.C., Lyric Poetry.
Theocritus, *Idylls*.
- R 2. History from 431 to 404 B.C., Thucydides, III-VII.
History of Philosophy.
- R 3. History of the Hellenistic Period; Euripides, *Medea*,
Hippolytus: Lucian, Selections; Plato, Minor Dialogues.

GREEK AND ROMAN CIVILIZATION

An interpretation of the contribution of Greece and Rome to Western civilization, in politics, literature, art, and philosophy.

Breasted, *Ancient Times* (Boston: Ginn and Co.).

Other texts will be prescribed at the beginning of the term.

Readings will be assigned on various topics as they develop.

HEBREW

PROFESSOR—Rev. H. A. Kent, M.A., D.D.

REGULATIONS

Students proceeding to Theology may, with the permission of the Board of Studies, substitute Hebrew 1 for a course in Latin.

COURSES OF INSTRUCTION

HEBREW 1.

The aim of this class is to enable students to read any of the narrative parts of the Hebrew Scripture. The Christmas term is devoted entirely to thorough study and practice of grammar and exercises. After the Christmas vacation parts of Genesis and Samuel, or other books, will be read, in addition to the work in grammar and composition.

Text-books: Davidson, *Hebrew Grammar* (20th or later editions), pages 1-113. Kittel, *Biblia Hebraica*, or *Hebrew Bible*, issued by B. and F. Bible Society.

Lexicons. Brown-Driver-Briggs, or Bagster.

HEBREW 2.

This class aims at more advanced work in the Hebrew language than that attempted in course 1. The prophetic and poetic literature of the Old Testament will be studied and lectures given on Hebrew Syntax and the principles of Textual Criticism of the Old Testament. Students will be practised regularly in translating English into Hebrew, both viva voce and in written exercises.

Text-books: Davidson, *Hebrew Grammar*, pages 113-236, *Hebrew Syntax*. *Hebrew Bible* and *Lexicon* as in course 1.

BIBLICAL LITERATURE

PROFESSOR—Rev. H. A. Kent, M.A., D.D.

REGULATIONS

1. Courses 1 and 2 are offered in alternate years. Only one of them may be counted towards a degree.

2. Subject to the provision of Section 1, the courses offered below are open to any student who has satisfied the requirements for concentration and distribution but needs one or more classes to make the necessary total for a degree.

BIBLICAL LITERATURE 1. OLD TESTAMENT LITERATURE AND HISTORY.

The beginnings of Hebrew literature; ballads; war-songs; folklore and Saga; historical prose; the literary sources of the Hexateuch and historical books; the origin and development of prophecy; Hebrew poetry and wisdom literature; the Apocryphal and Apocalyptic writings. Hebrew political history down to the Maccabean period, and the relation of the Hebrew people to the surrounding nations of antiquity.

Offered in 1932-1933,

P. C. Sands, *Literary Genius of the Old Testament*.

Jordan, *Ancient Hebrew Stories*.

Martin, *The Meaning of the Old Testament*.

BIBLICAL LITERATURE 2. NEW TESTAMENT LITERATURE AND HISTORY.

Origin of New Testament writings: Codices and Manuscripts; the Latin Bible; the English Versions; the Gospels studied as the literary sources of the teaching of Jesus; the Synoptic and Johannine Problems; the life and letters of St. Paul; the Christian Apocalypses; the social and religious conditions in the Roman Empire and the spread of Christianity up to the end of the first century.

Offered in 1933-1934 but not in 1932-1933.

Text-books:

Moffatt, *New Translation of the New Testament*.

Goodspeed, *The Story of the New Testament*.

Glover, *The Jesus of History*.

Robinson, *Life of Paul*.

GERMANIC LANGUAGES AND LITERATURES

PROFESSOR—Heinrich Henel, Ph.D.

ASSISTANT PROFESSOR—O. L. Bockstahler, M.A., Ph.D.

ASSISTANT PROFESSOR—Hilda C. Laird, B.A.

TUTOR—Alma E. Bockstahler, A.B.

READER—Walter Ade.

REGULATIONS

1. German A may be counted towards a degree. Students who enter the University without matriculation in German, and yet desire to specialize in this subject may complete their programme of work in the usual time. If German A is taken in the winter session, German 1 may be taken in the summer, but German A must not then be counted as a course.

2. Students taking German as one of the three main subjects on a Pass Course under new regulations should take 1, 2, and 10 (or A, 1, and 2 if not matriculated in German). Should more German be desired arrangements can be made with the Head of the Department to do work in Honours courses.

3. Students making German a Minor on an Honours Course should take five courses which are to be determined by the Department in which they are Majoring.

4. Students Majoring in German on an Honours Course should follow the courses as outlined and read as many of the prescribed works as possible during the long summer vacation, and present a report on such work at the beginning of the next term.

5. For Honours in German under the new Course, a student must take:

(a) Nine courses for Major as follows:

Seven courses in German 1, 2, 10, 12, 14a, 15b, 17a, 18b, 20a, 21b, with two supporting courses (an Honour History course and either Latin 2 or Philosophy 10).

(b) Three Reading courses, R 1, R 2, R 3.

(c) Five courses for Minor in French, English, Latin, Spanish or History.

(d) Six compulsory general courses to complete the work for degree:
With French as Minor: English 1, 2, Latin 1, Philosophy 1, Mathematics 1, one science.
With English as Minor: Latin 1, Philosophy 1, Mathematics 1, one science, two free options.

With Latin as Minor: English 1, 2, Philosophy 1, Mathematics 1, one science, one free option.

With Spanish as Minor: English 1, 2, Latin 1, Philosophy 1, Mathematics 1, one science.

With History as Minor: English 1, 2, Latin 1, Philosophy 1, Mathematics 1, one science.

6. While the direct method will be more or less used from the beginning, the advanced classes will be conducted in German.

7. Students should provide themselves at once with a dictionary, at first James' *English-German Dictionary*, then an all German one such as Hoffmann's *Wörterbuch der deutschen Sprache*.

8. The course in Scandinavian may be credited towards a degree as optional courses, but may not be included in the Honours group.

GERMAN A. PREPARATORY GERMAN.

This course is intended to meet the needs of students who, owing to the inadequate conditions in most of the secondary schools, enter the University with little or no knowledge of German. It is taken by students who need it to complete their Matriculation, or who desire to pursue a course in which German text-books or works of reference are prescribed or recommended. The requirements correspond generally to those for Pass Matriculation.

The work comprises drill on pronunciation, a study of the elements of grammar, the reading of easy literature, dictation, oral and written composition. *Deutsch für Anfänger* and *Lesebuch für Anfänger* must be purchased together.

Text-books:—

Hagboldt and Kaufmann, *Deutsch für Anfänger*. (University of Chicago Press).

Hagboldt and Kaufmann, *Lesebuch für Anfänger*. (University of Chicago Press).

Alexis and Pfeiler, *In Deutschland*. (Midwest Book Co.).

Pope, *German Reader for Beginners*, New Series. (Holt and Co.).

Collman, *Easy German Poetry*. (Ginn) (Part I).

GERMAN B. ELEMENTARY SCANDINAVIAN.

The aim of this course is to give the student a reading knowledge of Swedish and Dano-Norwegian, and thus open to him the rich store of modern Scandinavian literature.

A knowledge of German is not required, but is helpful. Students specializing in German, and desiring advanced credit for this work, should register for courses 25a and 26b instead where the work is conducted in German and Scandinavian.

Text-books:—

Elmqvist, *Swedish Grammar* (Augustana Book Concern).

Lagerlöf, *Valda Berättelser* (Augustana Book Concern).

One of the following:

Ibsen, *Et dukkehjem* (Gyldendalske Boghandel).

Björnson, *Synnöve Solbakken* (Free Church Book Concern).

This course will be given at an hour to be arranged if there is a sufficient demand.

GERMAN 1. FIRST YEAR GERMAN.

The work embraces the reading of modern authors, a more advanced study of grammar and syntax (in connection with the texts read and the written and oral exercises), memorizing of poems, writing from dictation, translation at sight, composition and oral practice.

Text-books:—

Chiles, *German composition and conversation* (Ginn).

Purin, *Deutsche Kulturkunde* (Johnson Pub. Co.).

Storm, *Der Schimmelreiter* (Ginn).

Lessing, *Minna von Barnhelm* (Holt).

Collmann, *Easy German Poetry* (Ginn).

GERMAN 2. SECOND YEAR GERMAN.

The work consists of a more critical reading of modern literature, both prose and verse, oral and written composition based on this literature, with a more advanced study of grammar and syntax.

Text-books:—

Fiedler, *German Short Stories* (Oxford).

Raabe, *Die schwarze Galeere* (Oxford).

Diamond, *Mitten im Leben* (Holt).

Heine, *Die Harzreise* (Heath).

Schiller, *Wilhelm Tell* (Holt).

Goethe, *Hermann und Dorothea* (Oxford, Lieder ed.).

GERMAN 3a. SCIENTIFIC GERMAN.

Prerequisite—German A or equivalent.

Also see Calendar for Applied Science.

Text-books:—

Greenfield, *An Introduction to Chemical German* (Heath).

Dippold, *Scientific German Reader* (Ginn).

Wait, *German Science Reader* (Macmillan).

Scientific Journals.

GERMAN 10. German Realien.

GERMAN 12. Survey of German Literature and History.

GERMAN 14a. Lessing's Life and Works.

GERMAN 15b. Goethe's Life and Works.

GERMAN 17a. Schiller. (Not offered in 1932-33).

GERMAN 18b. German Drama of the 19th Century. (Not offered in 1932-33).

GERMAN 20a. Die Novelle. (Not offered in 1932-33).

GERMAN 21b. Lyrics and Ballads. (Not offered in 1932-33).

GERMAN 22a. History of the German Language.

GERMAN 23b. Advanced German Composition.

READING COURSES IN GERMAN:

R 1.

R 2.

R 3. (Not offered in 1932-33).

FRENCH

PROFESSOR—P. G. C. Campbell, M.A., Docteur de l'Université de Paris.

ASSOCIATE PROFESSORS—W. M. Conacher, B.A., D. ès L. (Mont-réal).

M. Tirol, O.A., L. ès L. (Paris), Ph.D. (London).

LECTURER—H. Walpole, B.A. (Cantab.).

INSTRUCTOR—Jeanne C. McConnell, Brevet Supérieur, C.A.P.

REGULATIONS

1. French 1 is a prerequisite of French 2 and French 2 of all other courses.

2. Students offering French as one of their main subjects on a Pass course will take 1, 2 and 3.

3. Honour students making French one of their Honour subjects on the old Course after 1 and 2 will take 11 and 12 in the third year, and in the fourth year 20t, 21t and 22t. If offering 5 courses only 20t and one hour of 21t or 22t will be taken; if offering 7 courses, one of the Reading Courses will be taken instead of 99.

4. For Honours in French under the new Course, a student must take:

(a) Nine courses for Major as follows:

Seven courses in French 1, 2, 11, 12, 20t, 21t, 22t, 24, with two supporting courses chosen from Latin 2, English 30 and an Honours course in History according to the Minor chosen.

(b) Three Reading courses in French, R 1, R 2, R 3.

(c) Five courses for Minor in Latin, German, Spanish, English, or History.

(d) Six compulsory general courses to complete the work for degree:
With Latin as Minor: English 1, 2, Philosophy 1, Mathematics 1, one science, one free option.

With German as Minor: English 1, 2, Latin 1, Philosophy 1, Mathematics 1, one science.

With Spanish as Minor: English 1, 2, Latin 1, Philosophy 1, Mathematics 1, one science.

With English as Minor: Latin 1, Philosophy 1, Mathematics 1, one science, two free options.

With History as Minor: English 1, 2, Latin 1, Philosophy 1, Mathematics 1, one science.

5. All oral examinations must be taken at the University.
6. Honour groups for conversation and phonetic study will meet at hours to be arranged at the beginning of term.
7. For the Sir Wilfrid Laurier Memorial Scholarship of \$100 awarded for proficiency in French conversation, see SCHOLARSHIPS.
8. For the French Government Medal for an essay, see MEDALS.

COURSES OF INSTRUCTION

FRENCH 1. FIRST YEAR FRENCH.

- Zola, *L'Attaque du Moulin* (Holt).
 Daudet, *Le Petit Chose* (Holt).
 De Caillavet et de Flers, *Primerose* (Heath).
Favorite French Stories (Allyn and Bacon).
 Duhamel and Minssen, *Primer of French Prose Composition* (Rivingtons).
 Siepmann, *Short French Grammar* (Macmillan).
 The oral examination will be held during the term.

FRENCH 2. SECOND YEAR FRENCH.

- Molière, *Le Bourgeois Gentilhomme* (Ginn).
Les Cent meilleurs Poèmes Lyriques. (Gowan and Grey).
 Le Sage, *Gil Blas* (American Book Co.).
 Bazin, *La Terre qui meurt* (Calmann Lévy).
French Short Stories (Nelson).
 Moore and Slight, *Intermediate French Course, Part III,*
 (Blackie).

For Prose:—

- Ritchie and Moore, *Junior Manual of French Composition* (Cambridge University Press).
 but for Extra-mural students:—
 Duhamel and Minssen, *French Prose Composition for Middle Forms* (Rivingtons).

The oral examination will be held during the term.

FRENCH 3. THIRD YEAR PASS.

- V. Hugo, *Hernani* (American Book Co.).
 Loti, *Pêcheur d'Islande* (Holt).
Quelques Contes des Romanciers Naturalistes (Heath).
 Becque, *Les Corbeaux* (Heath).
 A. France, *Le Livre de mon ami* (Holt).
 Ritchie and Moore, *Junior Manual of French Composition* (Cambridge Univ. Press).

FRENCH 11. (a) Explication De Textes.

(b) Survey course.

FRENCH 12. Nineteenth Century Literature (1800-1850).

FRENCH 20t. Later Nineteenth Century Literature.

FRENCH 21t. Explication De Textes Modernes.

FRENCH 22t. Dramatic Theory and French Classical Tragedy.

FRENCH 24. (a) French Life and Art.

(b) La Langue Française Depuis La Guerre.

READING COURSES IN FRENCH:

R 1. Outline of French Literature.

R 2. L'Evolution des Théories Politiques et Morales au
XVIIIème Siècle.

R 3. The Novel in the Nineteenth Century.

SPANISH AND ITALIAN LANGUAGES AND LITERATURE

PROFESSOR—J. H. Brovedani, D-ès-L.

LECTURER—T. J. Lanigan, S.B.

TUTOR — Emily Williams.

SPANISH REGULATIONS

1. Spanish A may be counted towards a Pass degree under conditions specified in section 16 of GENERAL REGULATIONS.

2. Spanish A is a prerequisite to Spanish 1 and Spanish 1 is a prerequisite to all other courses.

3. Students making Spanish one of the three main subjects under the Pass Course will take A, 1, or 6 (with Spanish Matriculation 1, 2, and 6 or 10).

4. For Honours in Spanish under the new Course, a student must take:

(a) Nine courses for Major as follows:

Seven courses in Spanish 1, 2, 10, 21, 22, 30, Italian 1, with two supporting courses, an Honours course in History and either Latin 2 or an Honours course in English according to the Minor chosen.

Three Reading courses in Spanish, R 1, R 2, R 3.

(b) Five courses for Minor in French, German, English, or Latin.

(c) Six compulsory general courses to complete the work for degree: With French as Minor: English 1, 2, Latin 1, Philosophy 1, Mathematics 1, one science.

With German as Minor: English 1, 2, Latin 1, Philosophy 1, Mathematics 1, one science.

With English as Minor: Latin 1, French 1 or German 1 or Greek 1, Philosophy 1, Mathematics 1, one science, one free option.

With Latin as Minor: English 1, 2, French 1 or German 1 or Greek 1, Philosophy 1, Mathematics 1, one science.

5. Italian 1 may be substituted for one of the Honour courses. When Italian 1 is counted as one of the courses in Spanish for the Honour B.A. the marks in Italian will be averaged with those of the advanced courses in Spanish and a standing of 66% over all will be required.

7. Reference Books:

DICTIONARIES: Velázquez, *English-Spanish* (Appleton), or Cuyás, *English-Spanish* (Appleton), which is less expensive. Honour students are strongly recommended to use also La Fuente, *Diccionario ilustrado*, written entirely in Spanish, and Alemany, *Diccionario de la lengua española*.

GRAMMARS: For First and Second year Students: Ramsay, *Book of Modern Spanish*. For advanced students: Bello-Cuervo, *Gramática Castellana* (R. Roger & F. Chernovis, Paris), one of the best Grammars written entirely in Spanish, and Pidal, *Gramática Histórica*.

PRONUNCIATION: Moreno-Lacalle, *Elements of Spanish Pronunciation* (Sanburn). Navarro-Tomás, *Pronunciación Española* (Centro de Estudios Históricos, Madrid) the best work of its kind, indispensable for students taking the Specialist Course.

HISTORY OF LITERATURE: Fitzmaurice-Kelly, *History of Spanish Literature*. There is also a Spanish edition of this work with an up-to-date bibliography. Mérimée, *Histoire de la littérature espagnole* (Garnier Frères, Paris). Salcedo, *Literatura Española* (Casa Editorial Calleja, Madrid). Hurtado La Serna y González, *Historia de la literatura Española* (Madrid, 1921, also New York, Zabala and Maurin). Romera-Navarro, *Historia de la literatura Española* (Heath & Co, New York).

SPAIN AND ITS PEOPLE: Richard Ford, *The Handbook for Travelers in Spain*, London (John Murray, 8th edition, 1892). There is also an Everyman's edition of the same work entitled Ford's *Gatherings from Spain*.) George Borrow, *The Bible in Spain* (Dent), T. Gautier, *Voyage en Espagne*, E. de Amicis, *Spain and the Spaniards* (Putnam), are classics with which every student of Spanish must be acquainted. Havelock Ellis, *The Soul of Spain* (Houghton Mifflin Co.), S. L. Bensusan, *Home Life in Spain* (Macmillan), J. B. Trend, *A Picture of Modern Spain* (Houghton Mifflin Co., 1921), are good modern works on this subject.

COURSES OF INSTRUCTION

SPANISH A. ELEMENTARY SPANISH.

Grammar, Composition, Translation, Reading and oral exercises.
Prescribed texts:

Spanish Grammar and Reading (McKay).

Brown, *Spanish Reader for Beginners* (Croft), first and second term.

Six Tales from Calderón (Holt & Co.), second term.

Weisinger & Johnston, *A First Reader in Spanish* (Doubleday, Doran).

Hugo's Spanish Verbs.

SPANISH 1. INTERMEDIATE SPANISH.

Prerequisite—Spanish Matriculation, or Spanish A.

Grammar, Composition, Translation, Conversation and Study of the following prescribed texts:

Rivera, *Libro de Temas castellanos* (Heath), first term.

Hills, *Spanish Tales* (Holt).

McHale, *Un Viaje a Sud América*, Parts I and II (first term).

Tres Piezas Cómicas (Heath).

Ford, *Spanish Composition* (Heath).

Hugo's *Spanish Verbs*.

For Extra-mural students only.

SPANISH 2. ADVANCED SPANISH.

Prescribed texts:

Shapiro and Hurley, *Cosas de España* (Holt), first term.

Pardo Bazán, *Los Mejores Cuentos* (Doubleday, Doran).

Martínez de la Rosa, *La Conjuración de Venecia* (Sanborn), second term.

Quintero, *Doña Clarines* (Heath), second term.

McHale, *Un Viaje a Sud América*, Part III, first term.

Martínez Sierra, *Canción de Cuna* (Heath).

Remy, *Spanish Composition* (Heath).

SPANISH 6. COMMERCIAL SPANISH. Prerequisite, Spanish 1.

Prescribed texts:

Pardo Bazán, *Los Mejores Cuentos* (Doubleday, Doran).

McHale, *Un Viaje a Sud América*, Part III, first term.

Olmsted and Gordon, *Spanish Grammar* (Holt).

Whittem and Andrade, *Spanish Commercial Correspondence*

Martínez Sierra, *Canción de Cuna* (Heath).

Shapiro and Hurley, *Cosas de España* (Holt).

SPANISH 10. Modern Authors.

SPANISH 21. Cervantes and his Time.

SPANISH 22. Drama of the Golden Age.

SPANISH 30. Renaissance and the Romantic Period. The Picaresque Novel.

READING COURSES IN SPANISH:

R 1. To be announced.

R 2.

R 3.

ENGLISH LANGUAGE AND LITERATURE

PROFESSOR—George Herbert Clarke, M.A., D.Litt., F.R.S.C.

PROFESSOR—James Alexander Roy, M.A.

ASSOCIATE PROFESSOR—Henry Alexander, M.A.

ASSOCIATE PROFESSOR—Wilhelmina Gordon, M.A.

LECTURER—Magnus H. Irvine, M.C., M.A.

LECTURER—Eric E. Duthie, M.A.

READERS—H. W. Alford, Mary M. Chown, B.A. (first term),
Grace Davis, M.A., Margaret Davis, M.A., Marion N.
Duthie, M.A., Mrs. John Macgillivray (second term).

TUTORS—Margaret Fyfe, Doris Kent, Mary Macgillivray, B.A.
(second term), Margaret Reid, B.A., Margaret Seager,
B.A. (first term).

REGULATIONS

1. English 1 and 2 are required of all candidates for a degree in Arts. English 1 is a prerequisite for entrance to English 2. English 2 is a prerequisite for entrance to all courses numbered higher. English 10, however, should be taken if possible during the same year as English 2.

2. Students offering English as one of the main subjects on a Pass Course will take English 1, 2, and 3.

3. For Honours in English under the new Course, a student must take:

(a) Nine courses for the Major, as follows:

Eight courses in English 1, 2, 10, 14, 18, 16a, 19b, 20, 22, with one supporting course, Latin 2.

(b) Three Reading courses in English, R 1, R 2, R 3. (By permission of the Department, however, a Reading Course in History may be substituted for one of these three Reading Courses.)

(c) Five courses for the Minor, in History, French, Latin, Greek, German, Philosophy, or Spanish. (Note: When the Minor is Latin, the supporting course will be French 2.)

(d) Six compulsory general courses to complete the work for a degree:

With History as Minor: Latin 1, French 1 or Greek 1 or German 1, Philosophy 1, Mathematics 1, one science, one free option. (French 2 is recommended).

With French as Minor: Latin 1, Philosophy 1, Mathematics 1, one science, two free options. (History 2 and German 1 are recommended).

With Latin as Minor: French 1 or Greek 1 or German 1, Philosophy 1, Mathematics 1, one science, two free options. (French 2 and History 2 are recommended).

With Greek as Minor: Latin 1, Philosophy 1, Mathematics 1, one science, two free options. (History 2 and French 1 or German 1 are recommended).

With German as Minor: Latin 1, Philosophy 1, Mathematics 1, one science, two free options. (History 2 and French 1 are recommended).

With Philosophy as Minor: Latin 1, French 1 or German 1 or Greek 1, Mathematics 1, one science, two free options. (History 2 and French 2 are recommended).

COURSES OF INSTRUCTION (Pass)

Note: Students in each of the following courses will be furnished with a list of recommended reference books* in addition to those required.

ENGLISH 1. PROSE COMPOSITION, WITH LITERARY BACKGROUND.

A practical course in Prose Composition, with parallel reading. In the examination both knowledge of the texts and ability to write clearly and correctly will be required.

Prescribed texts:

Richard Wilson, *Thinking About English*. (London and Toronto: Thomas Nelson and Sons).

Richard Wilson, *Précis Notes, and Summaries*. (London and Toronto: Thomas Nelson & Sons).

Shakespeare, *Henry IV, Part I*, edited by W. A. Wright. (Toronto: Oxford University Press).

Joseph Conrad, *Typhoon*; H. G. Wells, *The History of Mr. Polly*. *Selected English Essays*, King's Treasuries Series. (London and Toronto: J. M. Dent & Sons).

Selected Short Stories, World's Classics, No. 193. (Toronto: Oxford University Press).

Representative Short Stories, edited by Amanda M. Ellis. (London and Toronto: Thomas Nelson and Sons).

In addition to the foregoing each student must possess a satisfactory English dictionary, preferably the *Concise Oxford Dictionary* (Toronto: Oxford University Press).

ENGLISH 2. A GENERAL INTRODUCTION TO ENGLISH LITERATURE.

This course is intended to provide a general knowledge of the history and development of English Literature, and to lay a foundation for the advanced specialized courses. It deals both with periods and with types, and seeks to encourage in the student some critical appreciation of literary values.

Prescribed texts:

John Buchan, *A History of English Literature* (Toronto: Thomas Nelson & Sons).

The World's Classics, Nos. 219-223 and Nos. 308-312, inclusive. (Toronto: Oxford University Press).

ENGLISH 3. ADVANCED PASS ENGLISH.

A study of English drama and prose fiction and of contemporary English prose and poetry.

Prescribed texts:

Plays before Shakespeare, edited by Evelyn Smith. (London and Toronto: J. M. Dent and Sons—King's Treasuries Series).

Earlier English Drama, edited by F. J. Ticknor, (London and Toronto: Thomas Nelson and Sons—The Teaching of English Series).

Three Elizabethan Plays, edited by J. D. Andrews and A. R. W. Smith. (London and Toronto: Thomas Nelson and Sons—The Teaching of English Series).

Shakespeare's Plays, (any complete edition).

Restoration Tragedies, and *Eighteenth Century Comedy*, Nos. 313 and 292 of The World's Classics Series, (Toronto: Oxford University Press).

The following novels, in the World's Classics Series: *Robinson Crusoe*, (No. 17), *The Vicar of Wakefield*, (No. 4). Students will be expected to read any one novel by Scott, one by Jane Austen, one by Dickens, one by Thackeray, one by Stevenson. They should own these books. (Other novels may be borrowed from the University Library.)

The Golden Book of Modern English Poetry, edited by Thomas Caldwell. (Toronto: J. M. Dent and Sons).

COURSES OF INSTRUCTION (Honours)

ENGLISH 10. An Introduction to Honours in English.

ENGLISH 14. Old and Middle English.

ENGLISH 18. Shakespeare.

ENGLISH 16a. Chaucer, Spenser, Milton.

ENGLISH 19b. The Classical Age.

ENGLISH 20. English Literature from 1780-1832.

ENGLISH 22. The Victorian and Georgian Periods.

READING COURSES IN ENGLISH:

R 1. The Novel.

R 2. The Drama.

R 3. American and Canadian Literatures (or an alternative topic).

HISTORY

PROFESSOR OF HISTORY AND DOUGLAS PROFESSOR OF CANADIAN AND

COLONIAL HISTORY—Duncan McArthur, M.A., F.R.S.C.

ASSOCIATE PROFESSOR—Reginald G. Trotter, M.A., Ph.D.

ASSOCIATE PROFESSOR—A. E. Prince. M.A., B.Litt.

LECTURER—W. E. C. Harrison, M.A. (London).

TUTORS—Edith Ashcroft, B.A.

T. D. Walter, B.A.

J. A. Huggins.

J. W. Grimmon.

REGULATIONS

1. All students proceeding to advanced work in History must take any two courses from History 1, 2, and 3. History 3 should be chosen if History 13 is included.

2. A student selecting History as one of his special subjects for a pass degree will take History 1, 2, and 3.

3. Candidates for Honours on the old Course will ordinarily select one of the following options according as they emphasize Canadian or European History:

A. History 2, 3, 13, and from two to four other courses approved by the Department.

B. History 1, 2, 16, and from two to four other courses approved by the Department.

4. Any half-courses in the department of Economics which deal with economic history or constitutional law and practice may be counted as half-courses in History. But in all such cases, the student will consult the Professor of History.

Prescription for Honours in History under the new Course:

1. *British and European History.*

(a) Eight courses for Major as follows:

Any two of History 1, 2 and 3, History 12, 13, 18a, 19b, 16, 17, and one chosen from 15a and 25b, 24 and 27, with one supporting course, Latin 2.

(b) Three Reading courses chosen from R 1, R 2, R 3, R 4.

Subject to the approval of the Department one Reading Course may be selected from those offered by the Minor subject.

(c) Five courses for Minor in English, Political and Economic Science, French, or Philosophy.

(d) Six compulsory general courses to complete the work for degree: With English as Minor: Latin 1, French 1 or German 1 or Greek 1, Philosophy 1, Mathematics 1, one science, one free option.

With Economics and Politics as Minor: English 1, 2; any two of Latin 1, Philosophy 1, Mathematics 1; French 1 or Greek 1 or German 1; one science.

With French as Minor: English 1, 2, Latin 1, Philosophy 1, Mathematics 1, one science.

With Philosophy as Minor: English 1, 2, Latin 1, French 1 or German 1 or Greek 1, Mathematics 1, one science.

2. *British and Colonial History.*

(a) Eight courses for Major as follows: Any two of History 1, 2, and 3, History 13, 16, 18a, 19b, 20a, 21b, 28a, 29b, and either 40a and 41b or 17, with one supporting course, Latin 2; and three Reading courses chosen from R. 1, R. 2, R. 3, R. 4.

(b) Five courses for Minor—as stated in 1(b).

(c) Six compulsory general courses—as stated in 1(c).

5. A knowledge of historical geography is required in all classes.

The most accessible atlases are:

Ramsay Muir, *Phillips' New Historical Atlas for Students* (Geo. Philips & Son).

C. Grant Robertson and J. G. Bartholomew, *An Historical Atlas of Modern Europe from 1789-1922*. (Oxford).

The Everyman Literary and Historical Atlases of Europe, America, Asia, Africa and Australasia (Dent).

E. W. Dow, *Atlas of European History* (Holt & Co.).

F. W. Putzger, *Historischer Schul-Atlas* (Leipsig).

W. R. Shepherd, *Historical Atlas* (Holt & Co.).

Burpee, *Historical Atlas of Canada* (Nelson)

HISTORY 1. EUROPEAN HISTORY FROM THE RENAISSANCE TO THE CONGRESS OF VIENNA—1453-1815.

The following subjects will be discussed in the lectures: Development of Nation-States; Italian and trans-Alpine Renaissance; the Spread of the Reformation and the Catholic Reformation; the Religious Wars; Age of Louis XIV; the Evolution of Prussia; the Rise of Russia; the Enlightenment and the Enlightened Despots; the French Revolution; the Napoleonic Era.

Hayes, *Political and Social History of Modern Europe*, Vol. I. (Macmillan). (1931-32).

W. H. Hudson, *Story of the Renaissance* (Cassell).

Fisher, *Napoleon* (Home University Library, Williams and Norgate).

For extra-mural students the following books are also required:

H. L. Hoskins, *Outline of Modern European History* (Doubleday, Page).

W. C. Abbott, *Expansion of Europe* (Holt).

HISTORY 2. BRITISH HISTORY SINCE 1714.

The lectures will deal with such topics as the following: The Hanoverian succession as the corollary of the Revolution of 1688; the development of party government and the cabinet; Imperial expansion and dismemberment; eclipse of the Whigs; the French Revolution and domestic reaction; the Industrial and Social Revolutions; the democratization of the constitution; the growth and government of the new Empire; Ireland; Britain and the Powers in the nineteenth century; the Empire in the World War; problems of peace and reconstruction.

T. F. Tout, *Advanced History of Great Britain*, Part III (Longmans). (1932-33).

A. S. Turberville, *English Men and Manners in the Eighteenth Century* (Oxford Press). (1932-33).

G. M. Trevelyan, *British History in the Nineteenth Century* (Longmans). (1932-33).

For extra-mural students the following books are also required:

W. T. Morgan, *A Guide to the Study of English History* (Knopf).

M. D. George, *English Social Life in the Eighteenth Century* (Macmillan). (1932-33).

G. G. Andrews, *Parliamentary Reform in England, 1830-1832*, (Crofts). (1932-33).

E. Rhys, editor, *The Growth of Political Liberty: A Source Book of English History*, (Everyman's Library: Dent). (1932-33).

HISTORY 3. CANADIAN HISTORY.

The lectures will deal with the history, exploration and discovery in North America; the establishment of English and French colonies; the advance of settlement; Puritanism in New England; economic and social conditions in the American colonies; the structure of colonial government; relations with the mother-country; extension of French interest in America; the fur trade; conflict between the British and French colonial systems; British policy after the Seven Years' War; the revolt of the Atlantic colonies; the United Empire Loyalists; the War of 1812; growth of settlement in the British provinces; social and economic problems; the movement for self government; commercial and industrial expansion; Confederation.

Becker, *Beginnings of the American People*.

Tyler, *England in America* (Harpers).

Andrews, *Colonial Self Government* (Harpers).

Greene, *Provincial America* (Harpers).

McArthur, *History of Canada* (Gage).

For extra-mural students the following books are also required:—
Thwaites, *France in America* and Howard, *Preliminaries of the Revolution*, both in the American Nation Series (Harpers).

HISTORY 12. Mediaeval European History, 300 1453.

HISTORY 13. The Development of British Colonial Policy.

HISTORY 15a. The Near Eastern Question.

HISTORY 16. Mediaeval English History.

HISTORY 17. British History since 1815.

HISTORY 18a. England under the Tudors, 1485-1603.

HISTORY 19b. England under the Stuarts, 1603-1714.

HISTORY 20a. The Basis of French Canadian Nationality.

HISTORY 21b. French and British in Canada—the First Phase, 1760-1812.

HISTORY 24. The Renaissance.

HISTORY 25b. United States History.

HISTORY 27. Europe since 1815.

HISTORY 28a. The Struggle for Responsible Government in Canada,
1812-1849.

HISTORY 29b. Canadian Development since 1849.

HISTORY 40a. Canadian Constitutional History, 1760-1867.

HISTORY 41b. See Economics 35b.

READING COURSES IN HISTORY:

R 1. Fourteenth Century England.

R 2. The England of George the Third.

R 3. Mid-Victorian England.

R 4. British-American Relations.

POLITICAL AND ECONOMIC SCIENCE

PROFESSOR—W. A. Mackintosh, M.A., Ph.D.

PROFESSOR—W. C. Clark, M.A.

ASSOCIATE PROFESSOR—C. E. Walker, B.Sc.(Acc.), C.A.

ASSOCIATE PROFESSOR—R. G. H. Smails, B.Sc.(Econ.), A.C.A.

ASSOCIATE PROFESSOR—C. A. Curtis, B.A., Ph.D.

ASSOCIATE PROFESSOR—N. McL. Rogers, M.A., B.Litt., B.C.L.

ASSOCIATE PROFESSOR—F. A. Knox, B.A.

TUTOR—R. O. Merriman, M.A.

REGULATIONS

1. Students selecting one course only in this Department may choose either Economics 1 or Politics 2.

2. Students selecting this subject as one of their main subjects on the Pass Course must take Economics 1 and 4, and Politics 2. Those wishing to take additional classes must qualify by obtaining a Division 2 grade in the prerequisite class. One course in Commerce may be included under this regulation.

3. Students applying for admission to the Honours Course must have at least Division 2 standing on Economics 1 or Politics 2.

4. Candidates for Honours under the old Course will be governed by the regulations in the Calendar for 1931-32.

For Honours in Economics or Politics, a student must pursue studies in the fields outlined in the Department's syllabus for Honours, which will be furnished on application to the Department.

Candidates for Honours will be given formal instruction, as an aid to achieving the necessary Honours standard, through the medium of the following courses:

(a) Nine courses for Major in Economics as follows:

Economics 1, Politics 2, Economics 10a, 11b, 12, 15, 16t, 17, 20, 21, 22.

(b) Three Reading courses, Economics R 1, R 2, R 3.

or (a) Nine courses for Major in Politics as follows:

Economics 1, Politics 2, Economics 12, History 40a, Politics 30b, Economics 16t, Politics 33, 34, 35, with one additional course in History or Philosophy.

(b) Three Reading courses, Politics R 1, R 2, R 3.

(c) Five courses for Minor in Philosophy, History or Mathematics, approved by the Department.

- (d) Six compulsory general courses to complete the work for degree:
With Philosophy as Minor: English 1, 2, Latin 1, French 1 or Greek 1 or German 1, Mathematics 1, one science.
With History as Minor: English 1, 2; any two of Latin 1, Philosophy 1, Mathematics 1; French 1 or German 1 or Greek 1, one science.
With Mathematics as Minor: English 1, 2, Latin 1, French 1 or German 1 or Greek 1, Philosophy 1, one science.

COURSES OF INSTRUCTION

ECONOMICS 1. INTRODUCTION TO ECONOMICS.

A general discussion of the principles governing the production, consumption, exchange and distribution of wealth, and the application of economic principles to such concrete problems as money, banking, taxation, trusts, the tariff, and the labor movement.

Slichter, *Modern Economic Society* (Holt).

POLITICS 2. INTRODUCTION TO POLITICS.

An approach to the study of the state, its nature, activities, and international relations, and a comparative study of governments, particularly those of Great Britain, the United States and the British Dominions.

Morris, *History of Political Ideas* (Christophers).

Laski, *Studies in the Problem of Sovereignty* (Yale).

Bagehot, *The English Constitution* (Kegan Paul).

Ilbert, *Parliament* (Home University Library).

Read, *International Relations* (American Foundation Society, N.Y.).

Mill, *Essay on Liberty and Representative Government* (Everyman).

ECONOMICS 3. ECONOMICS FOR APPLIED SCIENCE STUDENTS.

ECONOMICS 4. DESCRIPTIVE ECONOMICS.

A comprehensive study of the development of modern industry, its organization and resources.

Usher, *Industrial History of England*. (Houghton Mifflin.

Whitbeck and Finch, *Economic Geography* (McGraw-Hill).

Bartholomew, *School Economic Atlas* (Oxford).

- ECONOMICS 10a. Introduction to Accounting.
ECONOMICS 11b. (19b) Introduction to Statistics.
ECONOMICS 12. (25a, 23b) Money, Banking and International Trade.
ECONOMICS 14. Economic History and Geography.
ECONOMICS 15. Modern Economic Theory.
ECONOMICS 16t. International Economic Policies.
ECONOMICS 17. Economic History of Canada and the United States.
ECONOMICS 20. Business Cycles and Monetary Theory.
ECONOMICS 21. Applied Economics.
ECONOMICS 22. Problems of the Economic Order.

READING COURSES IN ECONOMICS:

- R. 1. Economic History and Geography.
R. 2. Economic History of Canada and the United States.
R. 3. Problems of the Economic Order.

- POLITICS 30b. Canadian Government.
POLITICS 32. Political Theory.
POLITICS 33. English Constitutional History and Law.
POLITICS 34. International Law and Organization. (Not offered in 1932-33).
POLITICS 35. The British Commonwealth of Nations.

READING COURSES IN POLITICS:

- R 1. Comparative Government.
R 2. English Constitutional History and Law.
R 3. Contemporary Political Problems.

MENTAL AND MORAL PHILOSOPHY

PROFESSOR OF PHILOSOPHY—George Humphrey, M.A., Ph.D.

LECTURER—Gregory Vlastos, Ph.D.

TUTORS—to be appointed.

REGULATIONS

1. Students choosing Philosophy as one of their main subjects on a Pass course will take courses 1, 2, and one of 10, 12 or 24a and 26b.

2. Students taking an Honours course in Philosophy and who do not take courses 1 and 2 in the same year will be permitted to combine one of these courses with appropriate Honour classes.

For Honours in Philosophy under the new Course, a student must take:

(a) Nine courses for Major as follows:

Seven courses in Philosophy, viz: (i) Philosophy 1, 2, 10, 18, 20, 22, 14a, 15b, or (ii) Philosophy 1, 2, 10, 12, 22, 24a, 26b, 30, with two supporting courses. For (i) the supporting courses will be Economics 2; French 2 or Latin 2: for (ii) they will be Biology 2; French 2, or Latin 2.

(b) Three Reading courses, R 1, R 2, R 3, or R 4, R 5, R 6.

(c) Five courses for Minor in History, Economics, English, Biology, or Latin.

(d) Six compulsory general courses to complete the work for degree:
With History as Minor: English 1, 2, Latin 1, French 1 or German 1 or Greek 1, Mathematics 1, one science. (Biology 2 is recommended if not taken).

With Economics as Minor: English 1, 2, Latin 1, French 1 or German 1 or Greek 1, Mathematics 1, one science. (Biology 2 is recommended).

With English as Minor: Latin 1, French 1, Mathematics 1, one science, two free options.

With Biology as Minor: English 1, 2, Latin 1, French 1 or German 1 or Greek 1, Mathematics 1, one science. (Chemistry 1 recommended).

With Latin as Minor: English 1, 2, French 1 or German 1 or Greek 1, Mathematics 1, one science, one free option. (Biology 2 is recommended).

COURSES OF INSTRUCTION

PHILOSOPHY 1. INTRODUCTION TO PHILOSOPHY.

The aim of the course is to introduce the student to the method of critical thinking about the nature of the world and of man. Some of the main problems will be indicated, and elementary answers will be considered.

Suggested Reading:

Russell, *Problems of Philosophy* (Home University Library).

Berkeley, *Three Dialogues between Hylas and Philonous*

(Everyman).

Hocking, *Types of Philosophy* (Scribner).

Plato, *Selections* (Modern Student's Library of Philosophy, Scribner).

Typed notes on the course will be distributed.

PHILOSOPHY 2. PSYCHOLOGY.

An elementary survey of mental life.

Pillsbury, *Essentials of Psychology* (Macmillan).

Kimball Young, *Source Book for Social Psychology* (Knopf).

Allport, *Social Psychology* (Houghton Mifflin).

Extra-Mural students will buy also

Humphrey, *Story of Man's Mind* (Dodd Mead).

PHILOSOPHY 10. History of Philosophy.

PHILOSOPHY 12. Psychology of the Child. (Not offered in 1932-33).

PHILOSOPHY 14a. Æsthetics.

PHILOSOPHY 15b. Kant.

PHILOSOPHY 18. Moral and Political Philosophy. (Not offered in 1932-33).

PHILOSOPHY 20. Logic. (Not offered in 1932-33).

PHILOSOPHY 22. The Principles of Psychology.

PHILOSOPHY 23. Psychology of the Instincts and Emotions. (Extra-mural only).

PHILOSOPHY 24a. Abnormal Psychology.

PHILOSOPHY 26b. History of Psychology.

PHILOSOPHY 30. Problems in Psychology.

READING COURSES IN PHILOSOPHY:

R 1. Metaphysics.

R 2. Ethics.

R 3. Contemporary Philosophy.

READING COURSES IN PSYCHOLOGY:

R 4. Systematic Psychology.

R 5. Contemporary trends in Psychology.

R 6. Applied Psychology.

MATHEMATICS

PROFESSOR—J. Matheson, M.A.

PROFESSOR—C. F. Gummer, M.A., Ph.D.

PROFESSOR—N. Miller, M.A., Ph.D.

ASSISTANT PROFESSOR—K. P. Johnston, B.A., B.Sc.

LECTURER—G. L. Edgett, M.A., Ph.D.

LECTURER—J. O. Watts, M.A.

LECTURER—R. W. Stevens, B.Sc.

ASSISTANT—Mrs. E. Newlands, M.A.

REGULATIONS

1. Mathematics 1, 2, 3a, and 7b, and Astronomy 1 are pass courses, and are open to all who have passed the prerequisites.

2. Students selecting Mathematics as one of their principal subjects for a Pass degree will take Mathematics 1, 2, 3a, and 7b; or Mathematics 1 and 2 and Astronomy 1. See also section 4 below.

3. Students are advised not to attempt a course in Honour Mathematics unless they have obtained high standing in the preceding pass course. Second division in such a course is the minimum standing with which a student is allowed to proceed.

4. Students who have a standing of at least second division in Mathematics 1, or second class in the Mathematics of Honour matriculation, and who intend to enter the Honour Course in Mathematics, should take courses 2, 10a, and 11b in the same year. They must obtain a standing of at least second division in these courses in order to proceed. If they pass these courses, but not with sufficient standing to proceed to Honours, they may count them as credits towards a Pass degree.

Students who have obtained credit in Mathematics 1, 2, 10a, and 11b, and are not proceeding with the Honours Course may count these to make Mathematics one of their principal subjects for a Pass degree.

5. Students who have taken Mathematics 10a and 11b and wish to proceed to Honours must obtain through the Registrar permission to do so. Such permission should be obtained as soon as possible after the completion of these courses.

6. The work to be completed for the degree of B.A. with Honours in Mathematics consists of the following:—

- (a) The following courses in Mathematics: Mathematics 1, 2, 10a, 11b, 12a, 14a, 15b, 16b, the courses outlined in Groups A and B in the syllabus given below, and Reading courses R 1, R 2, R 3.

- (b) Five courses for Minor in Physics or Economics.
With the consent of the Board of Studies, on the recommendation of the Department of Mathematics, a student may take as his minor a subject other than Physics or Economics.
- (c) Six general courses outside of the major and minor subjects:—
- (i) English 1, 2.
 - (ii) Latin 1. This may be replaced by German A and 1.
 - (iii) French 1, or German 1, or Greek 1.
 - (iv) Philosophy 1.
 - (v) Course 1 in any one of the sciences.

If the minor selected is Physics the course in (v) will be replaced by a course freely chosen in any subject other than Mathematics or Physics.

7. The work for a major in Mathematics will normally be covered by the student in five years from Pass Matriculation or in four years from Honour Matriculation. The normal distribution of the work over the five years is as follows:—

1st year—Mathematics 1.

2nd year—Mathematics 2, 10a, 11b.

3rd year—Mathematics 12a, 14a, 15b, 16b, and Reading course R. 1.

4th year—The courses of Group A, or of Group B, and Reading course R. 2.

5th year—The courses of Group B, or of Group A, and Reading course R. 3.

The work of Group A and that of Group B will be offered in alternate years. The student will take them in the order in which they are offered during his Course.

It is advisable for the student to aim at completing the minor subject at least one year before the time of graduation.

When in the work of the first two years a student has shown exceptional ability he may be permitted to take the lectures in Group A or in Group B in his third year and to arrange his reading in such a way that he may complete the whole course in four years instead of five.

COURSES OF INSTRUCTION

MATHEMATICS 1. TRIGONOMETRY, ANALYTIC GEOMETRY, AND ALGEBRA.

DeLury, *Intermediate Algebra*, (Copp Clark).

Hall and Knight, *Elementary Trigonometry* (as revised 1928), (Macmillan).

Tanner and Allen, *Brief Course in Analytic Geometry* (American Book Co.).

Mathematical Tables from Handbook of Chemistry and Physics (Chemical Rubber Co.).

MATHEMATICS 2. ELEMENTARY CALCULUS AND ANALYTIC GEOMETRY.

Granville, Smith and Longley, *Elements of the Differential and Integral Calculus* (Ginn).

Tanner and Allen, *Brief Course in Analytic Geometry* (American Book Co.).

Prerequisite, Mathematics 1.

MATHEMATICS 3a. MODERN SYNTHETIC GEOMETRY.

An elementary course. This half course with Mathematics 7b will count as a third course in Mathematics for a pass degree.

Durell, *Modern Geometry* (Macmillan).

MATHEMATICS 7b. MATHEMATICS OF INVESTMENT.

This class is intended primarily for students in Commerce, but is open to other students.

Hart, *Mathematics of Investment*, with tables (Heath).

Prerequisite, Mathematics 1.

ASTRONOMY 1. A COURSE IN DESCRIPTIVE ASTRONOMY.

Baker, *Astronomy* (van Nostrand).

Kingston, *Star Guide*.

Mathematics not prerequisite.

MATHEMATICS 10a. Algebra.

MATHEMATICS 11b. Calculus.

MATHEMATICS 12a. Determinants and Theory of Equations.

MATHEMATICS 14a. Spherical Trigonometry and Astronomy.

MATHEMATICS 15b. Analytic Solid Geometry.

MATHEMATICS 16b. Differential Equations.

COURSES FOR FINAL HONOURS:

Group A.

Mathematics 17t. Algebra and Finite Differences.

Mathematics 18t. Modern Synthetic Geometry.

Mathematics 19t. Advanced Calculus.

Group B.

Mathematics 20t. Statistics and Probability.

Mathematics 21t. Advanced Analytical Geometry.

Mathematics 22t. Theory of Functions of a Complex Variable.

READING COURSES IN MATHEMATICS:

R 1. To be announced later.

R 2.

R 3.

PHYSICS

PROFESSOR—A. L. Clark, B.Sc., Ph.D., F.R.S.C.

RESEARCH PROFESSOR—J. A. Gray, B.Sc., D.Sc., O.B.E., F.R.S.C.

PROFESSOR—W. C. Baker, M.A.

PROFESSOR—J. K. Robertson, M.A., F.R.S.C.

PROFESSOR—E. Flammer, B.Sc., Ph.D.

LECTURERS—H. M. Cave, M.A., Ph.D.

B. W. Sargent, M.A.

E. E. Watson, M.Sc., Ph.D.

DEMONSTRATORS—H. G. Conn, B.Sc.

R. Seright, B.Sc.

REGULATIONS

1. Students offering Physics as one of their chief subjects on a Pass Course will take Physics 1, 2 and 11.

2. For Honours in Physics under the new Course, a student must take:

(a) Nine courses for Major as follows:

Seven courses in Physics 1, 2, 11, 12a, 14a, 10b, 13b, 16a, 21a, 17b, 20b, with two supporting courses, Chemistry 1 and a course in Physics or Mathematics or another science.

(b) Three Reading courses in Physics, R 1, R 2, R 3.

(c) Five courses for Minor in Mathematics or Mathematics and Chemistry. (Note: When the Minor is Mathematics and Chemistry, the second of the two supporting courses shall be Mathematics 10a and 11b.)

(d) Six compulsory general courses to complete the work for degree: English 1, 2, Latin 1 or German 1, French 1 or German 1 or Greek 1, Philosophy 1, one free option.

COURSES OF INSTRUCTION

PHYSICS 1. MECHANICS, PROPERTIES OF MATTER, HEAT, WAVE-MOTION, SOUND, LIGHT, ELECTRICITY, AND MAGNETISM.

The work of this course is elementary, forming an introduction to the subject. Its purpose is to lay a thorough foundation for subsequent work in theoretical, experimental, and technical Physics, as well as to give a fairly complete elementary knowledge of the subject to those who do not intend to pursue it further. Only an elementary knowledge of Mathematics is required. This class is usually divided into two sections (a) those going on to further work in Physics, and (b) all others.

Text-book to be announced.

PHYSICS 2. LIGHT AND ELECTRICITY AND MAGNETISM.

LIGHT. The work in this section consists of a detailed discussion of vibratory and wave motion; a treatment of Reflection and Refraction from the standpoint of wave theory; and a study of Dispersion, Interference, Diffraction, Spectroscopy, Polarization, and Double Refraction.

ELECTRICITY AND MAGNETISM. A quantitative treatment of phenomena preliminary to the Mathematical Theory of these subjects.

Prerequisite: Physics 1. For allowance given for Honour Matriculation in Physics see section 7a under ADMISSION.

Texts:

Robertson, *Introduction to Physical Optics* (Van Nostrand).

Text-book in *Electricity and Magnetism* to be announced.

PHYSICS 11. Mechanics.

PHYSICS 10b. Dynamics of a Particle.

PHYSICS 12a. Introduction to the Mathematical theory of Electricity and Magnetism.

PHYSICS 13b. Electricity and Magnetism.

PHYSICS 14a. Heat.

PHYSICS 16a. Dynamics of Rigid and Elastic Bodies.

PHYSICS 17b. Physical Optics.

PHYSICS 20b. Electricity and Magnetism. Mathematical Theory.

PHYSICS 21a. Kinetic Theory of Gases.

PHYSICS 27a or b. Mechanics.

PHYSICS 28a or b. Thermodynamics. Advanced Course.

PHYSICS 29a or b. Partial Differential Equations of Physics.

PHYSICS 30b. Quantum Mechanics.

READING COURSES IN PHYSICS:

R 1. To be announced later.

R 2.

R 3.

The principal Physical Journals and books relating to the lectures and the laboratory work are kept in the Library of the Physics Department and in the University Library, where they may be freely consulted by the students. Certain of these may be borrowed for limited periods by making application to the librarians in charge.

CHEMISTRY

PROFESSOR OF CHEMISTRY—Arthur C. Neish, B.A., A.M., Ph.D.,
F.C.I.C.

PROFESSOR—J. A. McRae, M.A., Ph.D., F.I.C.

ASSOCIATE PROFESSOR—J. F. Logan, B.A., A.M., Ph.D.

ASSISTANT PROFESSOR—Grenville B. Frost, B.A., Ph.D.

ASSISTANT PROFESSOR—L. A. Munro, M.A., Ph.D., F.C.I.C.

ASSISTANT PROFESSOR—Roy L. Dorrance, M.A.

INSTRUCTOR—M. C. McNab, M.A.

MILTON HERSEY FELLOW—F. M. Alderson, B.A.

S. A. McNeight, B.Sc.

DEMONSTRATORS—F. S. Wilder, B.Sc.

A. C. Plewes, B.Sc.

D. E. Moss, B.A.

G. H. Heintzman.

1. Chemistry 1 and 2 are prerequisite to all other courses in Chemistry.

2. Students offering Chemistry as one of the main subjects for a Pass degree will take Chemistry 1, 2, and 3. For entrance to all other Chemistry courses a second division in Chemistry 2 is necessary.

3. For Honours in Chemistry under the new Course, a student must take:

(a) Nine courses for Major as follows:

Chemistry 1, 2, 12, 13, 14, 17, 22, 24, 25.

(b) Three Reading courses, R 1, R 2, R 3.

(c) Five courses for Minor: Mathematics 2a and 11b with four courses in Physics or Biology or Mineralogy and Geology.

(d) Six compulsory general courses to complete the work for degree: English 1, 2, French 1 or German 1 or Greek 1, Latin 1 (which may be replaced by German 1), Philosophy 1, Mathematics 1.

(Note: Students entering without full credit for Physics 1 must take Physics 1 and one course less in Chemistry.)

4. Students taking Honours in Chemistry must consult the Head of the Department after they have passed Chemistry 2.

5. Candidates for the degree of M.A. who include Chemistry as one of their two special subjects must have their choice of courses approved by the Department.

COURSES OF INSTRUCTION

General and Inorganic Chemistry

CHEMISTRY 1. GENERAL CHEMISTRY.

This course besides dealing with the history, methods of preparation, properties and industrial application of the most important non-metals and metals and their compounds, emphasizes the fundamental theories, laws and principles of Chemistry. Elementary analytical chemistry is introduced and a few simple unknowns are given. This course is open to beginners in Chemistry.

Texts—Kendall, *Smith's College Chemistry* (Century Co.)

Belcher and Colbert, *Properties and Numerical Relationships of the Common Elements and Compounds* (Century Company).

Qualitative Analysis

CHEMISTRY 2. QUALITATIVE ANALYSIS.

The lectures deal with the theory of analytical chemistry. The modern concept of the structure of matter is related to analytical behaviour. The development and application of the laws of equilibrium and solutions are emphasized.

The laboratory work consists of the systematic analysis of basic and acid ions leading to the analysis of alloys, salt mixtures, minerals and various commercial products.

Prerequisite—Chemistry 1.

Texts—Miller, *Theory of Qualitative Analysis* (Century Co.).

A. A. Noyes, *Qualitative Chemical Analysis*, 1922 edition, (Macmillan Co.).

Reference Texts—Ware, *Essentials of Qualitative Analysis* (Wiley).
Steiglitz, *Qualitative Chemical Analysis*, Vol. 1, (Century Co.).

Treadwell and Hall, Vol. I (Wiley).

CHEMISTRY 12. Organic Chemistry.

CHEMISTRY 13. Quantitative Analysis—Honours course.

CHEMISTRY 14. Physical Chemistry.

CHEMISTRY 16. Physiological Chemistry.

- CHEMISTRY 17. Industrial Chemistry.
CHEMISTRY 22. Advanced Organic Chemistry.
CHEMISTRY 24. Advanced Physical Chemistry.
CHEMISTRY 25. Physical Chemistry—Electro-Chemistry.
CHEMISTRY 31. General and Inorganic Chemistry.
CHEMISTRY 32. Organic Chemistry—Research.
CHEMISTRY 33. Quantitative Analysis—Research.
CHEMISTRY 34. Physical Chemistry—Research.
CHEMISTRY 36. Physiological Chemistry—Research.
CHEMISTRY 37. Industrial Chemistry—Research.
CHEMISTRY 44. Graduate course.
CHEMISTRY 101b. Advanced General Chemistry.
CHEMISTRY 106a. Colloid Chemistry.

READING COURSES IN CHEMISTRY:

- R 1. Inorganic Chemistry.
R 2. Colloid Chemistry.
R 3. History of Chemistry and Phase Rule.

BIOLOGY

PROFESSOR—W. T. MacClement, M.A., D.Sc.

PROFESSOR—R. O. Earl, B.A, S.M., Ph.D.

ASSOCIATE PROFESSOR—A. B. Klugh, M.A., Ph.D.

LECTURER—G. Krotkov, M.A.

REGULATIONS

1. Students taking only one course in this department must choose either Biology 1 or Biology 2; it is not necessary to take Biology 1 before Biology 2. Such students must attend laboratory, Section A. Section B is for students taking more than one course in Biology.

2. A student selecting Biology as one of the chief subjects on a Pass Course will take Biology 1, 2 and either 11 or 16.

3. Prescriptions for Honours in Biology under the new Course:

1. *Course for Teachers.*

- (a) Eight courses for Major as follows:
Biology 1, 2, 11, 12a, 13b, 16, 17, 21, 36, with one supporting course, Physics 1.
- (b) Three Reading courses in Biology, R 1, R 2, R 3.
- (c) Five courses for Minor: four courses in Chemistry with Physics 2.
- (d) Six compulsory general courses to complete the work for degree: English 1, 2, Latin 1 (which may be replaced by German 1), French 1 or German 1 or Greek 1, Philosophy 1, Mathematics 1.

2. *Course for Botanists.*

- (a) Seven courses for Major as follows:
Biology 1, 2, 11, 12a, 13b, 14b, 21, 31a, 45, with two supporting inq courses, Bacteriology 10 and Geology 1.
- (b) Three Reading courses in Biology, R 1, R 2, R 3.
- (c) Five courses for Minor: four courses in Chemistry with Physics 1.
- (d) Six compulsory general courses at stated in 1(d).

3. *Course for Zoologists.*

- (a) Eight courses for Major as follows:

Biology 1, 2, 16, 17, 26, 36, 37, 45, with one supporting course, Bacteriology 10.

- (b) Three Reading courses in Biology, R 1, R 2, R 3.

- (c) Five courses for Minor: four courses in Chemistry with Physics 1.

- (d) Six compulsory general courses as stated in 1(d).

BIOLOGY 1. GENERAL BOTANY.

The fundamental facts and principles of plant life. A careful study of form, structure and reproduction of representatives of the principal groups. Attention is given to life processes, particularly in the higher plants.

Textbook: Holman and Robbins, *Textbook of General Botany* (John Wiley and Sons). Laboratory Manual.

BIOLOGY 2. GENERAL ZOOLOGY.

Lectures on the classification, morphology, physiology, development, evolution, distribution, and economic importance of animals.

Microscopic study of the protozoa and hydra, and dissection of the clam, earthworm, locust, crayfish, fish, frog, bird and mammal.

Textbooks:

Dakin, *Elements of General Zoology* (Oxford Press).

Colton, *Practical Zoology* (D. C. Heath).

BIOLOGY 11. Plant Anatomy.

BIOLOGY 12a. Taxonomy of Plants.

BIOLOGY 13b. Morphology of Fungi.

BIOLOGY 14b. Plant Morphology.

BIOLOGY 16. Animal Anatomy.

BIOLOGY 17. Canadian Zoology.

BIOLOGY 18. Embryology.

BIOLOGY 21. Plant Physiology.

BIOLOGY 26. Animal Physiology.

BIOLOGY 31a. Physiographic and Geographic Plant Ecology.

BIOLOGY 36. Animal Ecology.

BIOLOGY 37. Economic Zoology.

BIOLOGY 45. Evolution and Genetics.

READING COURSES IN BIOLOGY:

R 1. Biological Theories.

R 2. General Physiology.

R 3.

BACTERIOLOGY

PROFESSOR—Guilford B. Reed, M.A., B.Sc., Ph.D.

REGULATIONS

1. Students on the old Pass course taking Biology as a Major may take as a part of the Biology prescription Bacteriology 10.
2. Students taking Biology as an Honours subject may elect as a part of the Biology prescription Bacteriology 10, 13a, and 20.

COURSES OF INSTRUCTION

BACTERIOLOGY 10.

An introductory course in general bacteriology, structure, physiology, fermentation and decomposition; a systematic study of the bacteria with particular reference to the pathogenic forms; infection and immunity.

Prerequisites: Biology 1, 2 and 13 or 21 and Chemistry 1.

BACTERIOLOGY 13a. THE MICROBIOLOGY OF FOODS AND WATER SUPPLIES. Hours to be arranged.

BACTERIOLOGY 20. RESEARCH IN BACTERIOLOGY.

GEOLOGY

PROFESSOR—M. B. Baker, B.A., B.Sc., F.R.S.C., F.G.S.A.

MILLER MEMORIAL RESEARCH PROFESSOR—E. L. Bruce, B.Sc.

M.A., Ph.D., F.R.S.C., F.G.S.A.

ASSOCIATE PROFESSOR—B. Rose, B.Sc., Ph.D., F.R.S.C., F.G.S.A.

ASSISTANTS—G. M. Furnival, B.Sc., J. D. Turner, B.Sc.,

H. F. Zurbrigg, B.Sc.

REGULATIONS

1. Mineralogy 1 is prerequisite to Geology 10b and 11. Mineralogy 10a is also prerequisite to Geology 10b. Geology 1 and 11 are prerequisite to Geology courses numbered 13, 17, 18, 19.

2. Students selecting Geology as one of the chief subjects on a Pass Course will take Geology 1, 11, and Mineralogy 1.

If the Mineralogy is being counted under another group the third course will be Mineralogy 10a and Geology 10b.

3. For Honours in Geology under the new Course, a student must take:

(a) Seven courses for Major as follows:

Geology 1, Mineralogy 10a, Geology 10b, 11a, 11b, 13, 14, 15, 17, with two supporting courses, Chemistry 1 and Physics 1.

(b) Three Reading courses, R 1, R 2, R 3.

(c) Five courses for Minor: Mineralogy 1, 11, Chemistry 2, 35, 41.

(d) Six compulsory general courses to complete the work for degree: English 1, 2, Latin 1 (which may be replaced by German 1), French 1, Philosophy 1, Mathematics 1.

COURSES OF INSTRUCTION

GEOLOGY 1. INTRODUCTORY COURSE IN PHYSIOGRAPHY AND GENERAL GEOLOGY.

The following topics indicate roughly the scope of the course: Forces operating on the earth's surface,—the atmospheric forces, streams, glaciers, waves, etc.; the land forms produced by these forces; volcanism; earth movements; structure of the earth's crust; mountain formation; kinds of rocks and their formation; fossils; outline of the history of the earth, including the evolution of its plant and animal life. In addition to those topics which are more particularly the province of Geology, consideration is given to the various types of topography and their method of formation, the atmosphere, its temperature, moisture and circulation, storms, climate, ocean currents, tides, etc., and, as far as time will permit, their influence on the human race will be indicated. This course will prove valuable to students who contemplate teaching Physical Geography in our schools.

The lectures are illustrated by maps, models, lantern slides, and specimens.

LABORATORY WORK will consist of the examination of typical specimens of fossil plants and animals, and of hand specimens of the more common rocks and minerals; together with the interpretation of geological maps, and types of topography. The laboratory work will also include field trips. It is therefore necessary that students should select their laboratory section on an afternoon on which they have no other laboratory period. The expenses of these trips are covered by the laboratory deposit.

Text-book: Norton, *Elements of Geology* (Ginn & Co.).

GEOLOGY 10b. Elementary Petrography.

GEOLOGY 11a. Structural Geology.

GEOLOGY 11b. Physiography.

GEOLOGY 13. Historical Geology.

GEOLOGY 14. Advanced Petrography.

GEOLOGY 15. Economic Geology.

GEOLOGY 17. Field and Laboratory Geology.

GEOLOGY 18. Systematic Paleontology.

GEOLOGY 19. Stratigraphy.

READING COURSES IN GEOLOGY:

R 1. History of the Progress of Geology.

R 2. Differentiation of Igneous Rocks.

R 3. To be announced next session.

GEOLOGY 10b. ELEMENTARY PETROGRAPHY.

This course is essentially on igneous Geology and Petrography, and will consist of lectures and discussion on the geological occurrences of igneous rocks, the processes of crystallization from magmas, the forms assumed, the textures, and the metamorphic changes that are produced in the intrusive mass itself, and on its surroundings. The lectures will be illustrated by projections of thin sections of rocks, and will be supplemented by laboratory work on hand specimens and rock slices. Students taking this course must have taken Mineralogy 10a.

Text-books:

Luquer, *Minerals in Rock Sections*.

Pirsson, *Rocks and Rock Minerals*.

GEOLOGY 11a. STRUCTURAL GEOLOGY.**GEOLOGY 11b. PHYSIOGRAPHY.****GEOLOGY 13. HISTORICAL GEOLOGY.**

Continental evolution and geologic life development with special reference to North America.

Text-book: Schuchert, *Outlines of Historical Geology*, 2nd Ed. (John Wiley and Sons).

GEOLOGY 14. ADVANCED PETROGRAPHY.

A course of lectures will be given on the microscopic characters and classification of igneous rocks, and on their origin, geological form, and general field characters. The lecture work will be supplemented by assigned special reading and by laboratory work with both hand specimens and microscopic slides. Special attention will also be paid to the metamorphic rocks.

GEOLOGY 15. ECONOMIC GEOLOGY.

The work in this class is an illustration of the principles of ore deposition. For this purpose type deposits in the largest producing districts throughout the world are studied in some detail. It is of course impossible to treat of all products, but the basis of classification and the fundamental principles underlying economic deposits are studied with particular reference to iron, copper, nickel, zinc, lead, silver, gold, aluminum, peat, coal, gas, oil, salt, abrasive and refractory materials. A few lectures on building stone, and on clays and the manufacture of clay products will be given.

Within one hundred miles of Kingston a greater variety of economic minerals and ores is mined than in any similar area in Canada, and possibly in the world. Through the kindness of the managers, advanced students may visit the various mines and thus gain valuable information regarding economic Geology.

MINERALOGY

PROFESSOR—J. E. Hawley, B.A., M.A., Ph.D., F.G.S.A.

ASSISTANTS—N. D. Runnalls, M.A., Chas. S. Longley, B.A.,
D. K. Burke, B.Sc.

REGULATIONS

1. Students taking Mineralogy 1 must have matriculation in Chemistry, or have passed in Chemistry 1, or take Chemistry 1, concurrently. Those having only Matriculation in Chemistry are advised to take Chemistry 1 before, or with, Mineralogy 1.

2. *Pass Course.* Mineralogy 1, 10, 11 are the three courses necessary if Mineralogy is selected as one of the chief subjects of a Pass Course. For such students it is recommended that Geology and Chemistry be made the other concentration groups.

3. For Honours in Mineralogy under the new Course, a student must take:

- (a) Nine courses for a Major as follows:
Mineralogy 1, 10a, 10b, 11, 12, 13, Geology 1, 10b, 11a, 14, Physics 2.
- (b) Three Reading courses, R 1, R 2, R 3.
- (c) Five courses for Minor: four courses in Chemistry with Physics 1.
- (d) Six compulsory general courses to complete the work for degree: English 1, 2, Latin 1 (which may be replaced by German 1), French 1, Philosophy 1, Mathematics 1.

4. Mineralogy as a Minor—(a) Mineralogy 1, 10a, 10b, 11, 12, 13.
(b) Split Minor with other sciences—Mineralogy 1, 10a, and 11 with any other course in Mineralogy if desired.

5. For admission to an Honours Course in Mineralogy a student must have made 62 per cent in Mineralogy 1. Students intending to take this course should consult with the Department regarding the order in which the courses should be taken. Attention is called to the general regulations regarding entrance to and continuance in Honours Courses.

6. All students in Mineralogy are expected to take part in the field excursions which are made during October and November.

7. Each student in the Department is supplied with a locked cabinet containing about 150 mineral specimens.

COURSES OF INSTRUCTION

MINERALOGY 1.

A course in Elementary Crystallography, Blowpipe Analysis and Descriptive and Determinative Mineralogy of about 100 common or more important minerals together with practical work in their identification. The world distribution of minerals is also studied.

Prerequisite—Matriculation Chemistry or Chemistry 1 taken concurrently.

Text-book: Ford, *Dana's Manual of Mineralogy*, 14th Ed. (John Wiley and Sons, Inc., New York, 1929).

For students intending to continue in Mineralogy, Ford, *Dana's Text-book of Mineralogy*, 3rd Edition (John Wiley and Sons, Inc., New York, 1922).

MINERALOGY 10a. Elements of Optical Mineralogy.

(same course as Geology 10a).

Text-book: *Elements of Optical Mineralogy*, Part I, by A. N. Winchell, 3rd Edition (John Wiley and Sons, Inc., New York, 1928).

MINERALOGY 10b. Optical and Physical Mineralogy and Crystallography.

MINERALOGY 11. Descriptive and Determinative Mineralogy.

MINERALOGY 12. Metallic Ore Minerals and Mineralogography.
(alternates with Mineralogy 13).MINERALOGY 13. Non-Metallic Minerals.
(alternates with Mineralogy 12).

READING COURSES IN MINERALOGY:

R 1. World Distribution of Minerals.

R 2. X-rays and Crystal Structure.

R 3. Metamorphism of Minerals.

GRADUATE COURSES

I. REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS

1. *Pre-requisite work.* A candidate for the degree of Master of Arts must have taken the degree of Bachelor of Arts with Honours in two subjects in some preceding academic year.

2. *Application.* Application for permission to become a candidate for the degree of Master of Arts must be made to the Registrar. The applicant, if not a graduate of Queen's University, should send an official certificate giving full details of his previous academic training, including courses taken and grades received, together with a marked Calendar showing the content of the courses. He should also state in what field he desires to carry on his studies. The amount and distribution of work will be determined in each case by the Board of Studies on the basis of the general regulations contained in sections 3 and 4 below:

3. *Character of the work.* The degree of Master of Arts is given, not on the ground of general attainments, but in recognition of the candidate's wide knowledge of a special field of study. A candidate must ordinarily take advanced work in the two main subjects of his undergraduate Course. With special permission, however, he may concentrate on one of his special subjects or he may count work in a third related subject if it can be shown to belong to a consistent plan of study.

The work prescribed shall consist of the following:

(a) *Advanced* lecture courses.

(b) Directed special studies, with reports, essays, and conferences.

A thesis or other piece of independent work will be required from all candidates.

4. *Amount of work.* The work shall be the equivalent of four Honour courses beyond the standing required for the degree of Bachelor of Arts with Honours in two special subjects under the present system of studies. Those who do not qualify under this condition must complete such work as may be necessary to bring their standing to the level of B.A. with Honours in two subjects.

Those who have taken the degree of Bachelor of Arts with Honours in connection with the Special Course in Science for Teachers must bring their standing in two subjects up to the required level before being admitted to the course for M.A.

5. *Standing required.* The degree of Master of Arts will be conferred upon a student who, having satisfied the conditions mentioned above, makes at least sixty-six per cent. in each of the prescribed courses.

6. *Fees.* The fees charged are the same as for undergraduate work. See FEES.

7. *Attendance.* The minimum attendance required of M.A. candidates is one year.

Departmental outlines of work that may be counted towards the degree of Master of Arts are given below:

Details of courses referred to by numbers will be found under the various Departmental announcements.

Latin

Lecture course: 100.

Directed special studies in Virgil.

Greek

Lecture course: 109.

Directed special studies in Greek Art and Archaeology and in Greek Philosophy and Religion.

German

Lecture courses: 100a, 101b, 106b, 110a, 111b.

Directed work shall be done in a special field of study which shall be approved by the department. An acceptable thesis shall be written in duplicate embodying the results of independent investigation.

French

Lecture courses: 100, 105, 110, and 115. If only one of these is chosen it must be 110 or 115.

Directed special studies to be determined upon consideration of the candidate's previous Course.

Spanish

Lecture courses: Any courses numbered above 100.

Directed special studies based on:

- (a) *Literatura Caballeresca.*
- (b) *Escritores Místicos Españoles.*
- (c) *Dramáticos contemporáneos a Lope de Vega.*
- (d) *Calderón considerado como dramático religioso.*
- (e) *Espronceda y la Sociedad Española de la Epoca Romántica.*
- (f) *Literatura del Siglo de Oro.*
- (g) *Autores Modernos.*

English

For the present, candidates for the M.A. degree will be expected to take any two of the following:

Lecture courses: 20, 22.

Reading courses: 1, 2, and 3.

A Seminar (other than that already taken).

Directed Special Studies (in addition) in one of the following:

Beowulf, English Prosody, Marlowe and Jonson, Sir Walter Scott, Shelley and Keats, Wordsworth and Coleridge, Dickens and Thackeray, Browning and Tennyson, Thomas Hardy, Canadian and American Literatures.

History

Courses are open in three fields of history:

A. EUROPEAN HISTORY. Courses 12, 15a, 27.

B. BRITISH HISTORY. Courses 16, 17, 18a, 19b.

C. CANADIAN HISTORY. Courses 20a, 21b, 25, 28a, 29b, 40a, 41b.

Candidates for the Master's degree may, at the option of the instructor, be required to do additional work to that prescribed for undergraduates enrolled in the same course.

Such of these courses in Canadian History as shall be offered at the Canadian Archives at Ottawa in the summer may with advantage be taken there instead of at the University in the winter.

Directed Special Studies shall be pursued by each candidate upon a topic selected in one of these three fields. Upon the topic a thesis shall be written based in large measure on original sources.

Political and Economic Science

Lecture courses: For the present candidates for the degree of M.A. may make a selection from the courses offered in Honours in the fourth and fifth year.

Directed special studies in Economic History under Professor Mackintosh, in Business Cycles under Professor Clark, in Banking and Public Finance under Professor Curtis, in International Trade and Finance under Professor Knox, in Political Science under Professor Rogers.

Philosophy

Lecture courses: Candidates should, after consultation with the department, choose courses from those numbered 25, 27, if not already taken, 28, 29, 44, 48.

Directed special studies: Candidates should, with the advice of the Department, select a field of work having a certain unity of interest, and their special subject for private study should be within this field.

Mathematics

Lecture courses: Any of the half-courses numbered from 30 to 38.

Directed special studies: Certain half-courses from 30 to 38 may be taken in the form of directed special studies, as advised by the Department and approved by the Board of Studies.

Physics

Lecture courses: A minimum of three lectures a week on topics selected from half-courses 27 to 34.

Directed special studies: Physics 35.

Chemistry

Lecture courses: Two full courses selected from 101b, 121, 106b, 145, 141, 171a.

Thesis and directed special studies selected from 201, 221, 231, 241, 261, 271.

Biology

Lecture and laboratory courses to be selected in consultation with the Head of the Department from 110 Dendrology, 113 Plant Pathology, 115 Cytology, 116 Advanced Economic Zoology, 117 Advanced Economic Entomology.

Geology

Field excursions are required for all these courses.

Geology 113, Principles of Pre-Cambrian Geology. The origin, history and distribution of the rocks older than the Cambrian. Special attention will be given to the Canadian pre-Cambrian areas. The course will be given in alternate years. It will be offered in 1932-33.

Geology 114, Metamorphic Geology. Prerequisites as for 113. A study of the changes that rocks undergo. Special attention will be paid to the origin of gneisses and schists. It will be given in 1932-33.

Geology 115. Pre-Cambrian Ore Deposits. Discussion of ore deposits in Pre-Cambrian rocks with especial reference to those in Canada. The genesis and character of the deposits will be studied in detail.

This course will not be offered in 1932-33. Open only to graduate students. Prerequisites: Geology 1 and 10b, Mineralogy 1, 10a, and 11. It is advisable that Geology 15 shall also have been taken.

Seminar: A seminar for graduate students every two weeks for discussion of geological literature. Attendance is voluntary and no formal registration is required.

Mineralogy

Lecture courses: Mineralogy 115 and 116. By special arrangement certain courses in Geology may be substituted.

Mineralogy 115. Advanced Optical Mineralogy alternate with Mineralogy 116; given 1932-1933.

Mineralogy 116. (a) Advanced Crystallography, (b) Advanced Mineralography, alternates with 115.

Directed special studies, on either metallic or non-metallic minerals, with Thesis.

THE DEGREE OF DOCTOR OF PHILOSOPHY

The University will accept candidates for the degree of Ph.D. only when it is satisfied that the Departments concerned are in a position to give the Course adequate attention and that the candidate is qualified to undertake the work.

A statement of the regulations governing the Course will be sent on application.

DEGREES, MEDALS, SCHOLARSHIPS, AND PRIZES

1931

DEGREES

HONORARY DEGREES

Degree of LL.D.

Burrows, A. G.	Toronto, Ont.
Gussow, H. T.	Ottawa, Ont.
Jefferys, C. H.	Toronto, Ont.
Routley, Dr. T. C.	Toronto, Ont.

Degree of D.D.

Micklem, Professor N.	Kingston, Ont.
McDonald, Rev. R. J.	Yorkton, Sask.

DEGREES BY EXAMINATIONS

Degree of Ph.D.

Pritchett, J. P.	Grand Forks, N. Dakota
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Degree of M.A.

Alderson, Freeman M.	Thamesford, Ont.
Ball, Korleen Elisabeth, B.A.	Cornwall, Ont.
Bennie, Marian Alice, B.A.	Beachburg, Ont.
Brennan, Margaret Ursula, B.A.	Deseronto, Ont.
Burchill, Charles S., B.A.	Alameda, Sask.
Charlesworth, Edward H., B.A.	Harriston, Ont.
Cook, William W., B.A.	Erin, Ont.
Davis, Mary Grace, B.A.	Kingston, Ont.
Ebersole, Edgerton O., B.A.	Kingston, Ont.
Hearne, Edna Marie, B.A.	Burford, Ont.
Hern, Grant G., B.A.	St. Mary's, Ont.
Jolliffe, Fred. T., B.A.	Kingston, Ont.
Kindle, Edward D., B.A.	Ottawa, Ont.
Lockhardt, Andrew D., B.A.	Orillia, Ont.
MacIntosh, Margaret C., B.A.	Campbellton, N.B.
Rogers, Arthur O., B.A.	Whitby, Ont.
Shaver, Ruth L., B.A.	Pictou, Ont.
Showman, Wallace H., B.A.	Alliance, Alta.
Tanser, Harry A., B.A.	Toronto, Ont.
Watts, George S., B.A.	Kingston, Ont.

Degree of B.A. (with Honours)

Ackerman, Margery (History and English)	Campbellford, Ont.
Adamson, James G. (Economics and History)	Ottawa, Ont.
Allan, Percy C. (History and English)	Toronto, Ont.
Ashcroft, Edith (English and History)	Kingston, Ont.
Ashley, Archibald T. (Mathematics and Economics)	Madoc, Ont.
Bailey, William K. (Biology and Chemistry)	Harold, Ont.
Bamforth, Dorothy C. (German and French)	Peterboro, Ont.
Bishop, Arthur G. (Mathematics and Physics)	Conn, Ont.
Bleecker, Dougall F. (Mathematics and Physics)	Trenton, Ont.
Brown, William C. (Mathematics and Mineralogy)	Kingston, Ont.

- Caldwell, Alexander (Latin and Greek)...Cornwall, Ont.
 Calvin, Archibald A. (History and English) Toronto, Ont.
 Cameron, Robert A. (English and History) Pembroke, Ont.
 Campbell, Bell (English and French).....St. Catharines, Ont.
 Charlesworth, Josephine E. (Biology and Chemistry)Harriston, Ont.
 Code, Isabel Frances (Latin and Greek) ..Smith's Falls, Ont.
 Corkill, James M. B. (Biology and Chemistry)Napanee, Ont.
 Costin, Carrie Lillian (Greek and Latin) ..Princeton, Ont.
 Craig, James S. (Economics and History) Ottawa, Ont.
 Crossley, Edward L. (English and History) Princeton, Ont.
 David, Lillian Jean (English and History) .Picton, Ont.
 Ebersole, Edgerton O. (Biology and Chemistry) Kingston, Ont.
 Edge, Alix (English and History) Durham, Ont.
 Falkner, Graeme (History and Economics) Ogdensburg, N.Y.
 Faust, Anna J. (History and English)Wadena, Sask.
 Ferguson, Edith Anne (English and History)Maxville, Ont.
 Forbes, Robert R. (Science)Ottawa, Ont.
 Fox, Edward W. (Science)Walkerville, Ont.
 Frye, John W. (Economics and History) ..Soperton, Ont.
 Gardiner, Bert G. (Biology and Chemistry) Freelon, Ont.
 Giles, Annie Helen (History and English) .Ottawa, Ont.
 Handler, Arnold B. (Economics and Philosophy) Kingston, Ont.
 Heffernan, Harold D. (Mathematics and Physics)Athens, Ont.
 Henderson, William J. (Physics and Mathematics)Wingham, Ont.
 Hermanson, Victor W. W. (History and English)Fort William, Ont.
 Hinchley, John M. (Mathematics and Physics)Brantford, Ont.
 Honeywell, Doris M. (Latin and Greek) ..Woodruffe, Ont.
 Houston, Margaret J. (History and English) Fort William, Ont.
 Johnson, Anne Claire (English and Latin) Valentia, Ont.
 Kelly, Fred. M. (Mathematics and Physics) Pembroke, Ont.
 Key, Arthur B. (English and History)Gananoque, Ont.
 Kirkland, Maurice F. (English and History) Oshawa, Ont.
 Langford, Arthur N. (Biology and Chemistry)Simcoe, Ont.
 Langford, Clarence F. (History and English)Lucan, Ont.
 Leeder, Cecil E. (English and History) ...Caintown, Ont.
 Lee, Elizabeth D. (Latin and Greek)Alma, Ont.
 Locklin, Mae (English and History)Brighton, Ont.
 Lounsbury, Clifford R. (Biology and Chemistry)Brantford, Ont.
 Lovell, William L. (Biology and Chemistry)Gorrie, Ont.
 Madill, Frank E. (Mathematics and Economics)Lakefield, Ont.

- Manning, William G. (Science) Rosetown, Sask.
 Marshall, John S. (Physics and Mathematics) Niagara Falls, Ont.
 Martin, Madge A. (Mathematics and Physics) Moose Jaw, Sask.
 Mervyn, George G. (Biology and Chemistry) Hanover, Ont.
 Moss, Percy E. (Chemistry and Biology) .. Chesley, Ont.
 Mowat, Angus McG. (English and History) Windsor, Ont.
 McArthur, Annie I. (Mathematics and Physics) Parry Sound, Ont.
 McCutcheon, John W. (Chemistry and Physics) Hamilton, Ont.
 McGill, Jane S. (Latin and Greek) Thornloe, Ont.
 McGuire, Herman A. (English and French) Toronto, Ont.
 MacIlraith, Kenneth M. (Mathematics and Physics) Ottawa, Ont.
 McIntyre, Alma A. (English and French) East Templeton, Que.
 MacKellar, Ernest A., B.A. (History and English) Glencoe, Ont.
 MacLachlan, John D. (Biology and Chemistry) Kemptville, Ont.
 MacLachlan, Percival L. (Biology and Chemistry) Kemptville, Ont.
 MacMillan, Warnock (English and History) Hampstead, Ont.
 Nicholson, Arthur E. D. (English and History) Dundurn, Sask.
 Nicholson, Gerald W. L. (English and History) Foam Lake, Sask.
 Nixon, Dorothy E. (English and History) .. Cobourg, Ont.
 O'Brien, Catherine E. (Latin and Greek) .. Merrickville, Ont.
 O'Connor, Margaret Helen (Spanish and French) Kingston, Ont.
 Pierce, Hilda O. (History and English) ... Joycelville, Ont.
 Poapst, Esther Minerva (Biology and Mathematics) Northfield Station, Ont.
 Powell, Olive E. (German and French) .. Carleton Place, Ont.
 Reid, Margaret Elizabeth (English and History) Kingston, Ont.
 Ruddick, Helen Alicia (English and History) Brockville, Ont.
 Sabine, Helen Gertrude (English and History) Orrville, Ont.
 Sanderson, Ira R. (Mathematics and Physics) Ida, Ont.
 Scharfe, Howard C. (Economics and History) Ottawa, Ont.
 Stewart, Jessie F. (English and History) .. Arnprior, Ont.
 Stewart, John H. (Latin and Greek) Osgoode Station, Ont.
 Summerby, Frederika M. (English and History) Brantford, Ont.
 Swerdfeger, Harold E. (Chemistry and Biology) Morewood, Ont.
 Tancock, Herbert V. (English and History) Galt, Ont.
 Tennant, Herbert M. (English and History) Ottawa, Ont.
 Tully, Mary F. (Latin and Greek) Markham, Ont.

Walter, Thomas D. (History and English) . Woodford, Ont.
 Ward, Jessie C. (History and English) . . . Kingston, Ont.
 Wilson, Alice Pearl (English and History) . Garden Hill, Ont.
 Wilson, Jessie Bass (Biology and Chemistry) Westmeath, Ont.
 Wood, John J. (English and French) Ottawa, Ont.
 Wylie, James B. (Biology and Chemistry) . Leaside, Ont.

Degree of B.A. (Pass)

Adams, Ethel May Belleville, Ont.
 Archer, Muriel Vernon Calgary, Alta.
 Bell, John Davison Kenton, Man.
 Billings, Marjory Jean Lyn, Ont.
 Bishop, Dorothy Marguerite Kingston, Ont.
 Blanchard, Melvin Scott Belleville, Ont.
 Brennan, Sylvester Lawrence Arnprior, Ont.
 Bresee, Gladys Geraldine Brockville, Ont.
 Burns, Harold Beaton Lucknow, Ont.
 Byron, John Thompson Belleville, Ont.
 Carson, Robert Beverly Ottawa, Ont.
 Caughey, Mildred Jean Kingston, Ont.
 Cluff, Christine Elizabeth Maxville, Ont.
 Conner, William John Merlin, Ont.
 Cousins, Reginald Aldridge Sydenham, Ont.
 Culp, Viola Ruth Vineland, Ont.
 Darling, Ezra Ellis Roseneath, Ont.
 DeDiana, Arthur John Hamilton, Ont.
 Deeley, Charles Frederick London, Ont.
 Deline, Harold Gleen Napanee, Ont.
 Dolan, Margery Eleanor London, Ont.
 Elliott, Isobel Esther Prescott, Ont.
 Fletcher, Farewell Stewart Preston, Ont.
 Fortune, Francis James, B.Com. Mallorytown, Ont.
 Fosbury, Alfred Walter Mount Forest, Ont.
 Foster, Myrtle Jennie Tweed, Ont.
 Gibson, Errol Manley Windsor, Ont.
 Graves, Jean Evelyn Kingston, Ont.
 Hagerman, Lillian Toronto, Ont.
 Hamilton, George Harvey Hanover, Ont.
 Hand, Florence May Windsor, Ont.
 Hare, William Lester Britannia Heights, Ont.
 Harvey, Philip Lachine, Que.
 Hazen, J. Grant Hamilton, Ont.
 Hill, Earl Vencel Ingersoll, Ont.
 Judd, William John Port Arthur, Ont.
 Kennedy, Catherine (Sister) Lindsay, Ont.
 Kennedy, Robert Alexander Burk's Falls, Ont.
 Kent, Olive Jean Catherine Tompkinsville, N.Y.
 Kerfoot, Anna Laura Toronto, Ont.
 Killins, Robert Ivan Niagara Falls, Ont.
 Kindree, James Sheldon Toronto, Ont.
 Kitts, Lula Viola Windsor, Ont.
 Larrigan, Edward William Trossacks, Sask.
 Leggett, Mary Phyllis Newboro, Ont.
 Lewis, Christena May Paisley, Ont.
 Lisk, Beatrice Hazel Eganville, Ont.
 Loa, Gerhard Ottawa, Ont.

Mahony, Elizabeth Miriam	St. John, N.B.
Mercer, George Alwyn	Bay Roberts, Nfld.
Miller, Charlotte Bell	Napanee, Ont.
Miller, Erle G.	Stoney Creek, Ont.
Miller, Ruth Louise	Kingston, Ont.
Milne, Anne Cameron	Chesley, Ont.
Moran, David Morley Burr	Mountain View, Ont.
Mungovan, Henry Grattan	Toronto, Ont.
MacClement, William Donald	Kingston, Ont.
McColl, Alastair Graham	Hamilton, Ont.
MacDonald, Ruth Lenore	Fort William, Ont.
MacDonald, Sara Ethel	Douglas, Ont.
McEwan, Annie Esther	Newington, Ont.
McEwen, Jeanie Hamilton	Lindsay, Ont.
MacKay, Ewart Washington Brooks	Lorne Valley, P.E.I.
McKee, Thomas Andrew Shearer.....	Paisley, Ont.
McLaren, Caroline Osborne	Forester's Falls, Ont.
McLaughlin, Vivian	Napanee, Ont.
MacLean, Mrs. Vera Cavanagh	Shelter Bay, No. Shore, P.Q.
McLennan, Grant Ramage	Ottawa, Ont.
McNeeley, Madeline	Perth, Ont.
McPhee, Alexander Murray	Outremont, P.Q.
Macpherson, Arthur Gordon	Orangeville, Ont.
Macpherson, Gordon Barwick	Kingston, Ont.
Mactavish, Kenneth Lachlan	Montreal, P.Q.
O'Connor, Cyril Valerian	Fort William, Ont.
Ogden, Charles Bertram	MacDonald College, P.Q.
O'Leary, Sister Mary Beatrice	Barry's Bay, Ont.
Ouellette, Sister Marie Eugenia	Sandwich, Ont.
Paterson, Elizabeth Fleming	Westmeath, Ont.
Patterson, Marian Isobel	Kingston, Ont.
Penney, Henry Lloyd	Buckingham, P.Q.
Pierce, Muriel Eleanor	Kingston, Ont.
Powell, Mary Jane.....	Mallorytown, Ont.
Redick, Ruth Maud	Trenton, Ont.
Richardson, Kenneth Augustus	Wyoming, Ont.
Robertson, Ernest John	Orillia, Ont.
Ryan, Katie	Kingston, Ont.
Seymour, Elizabeth Irene	Brockville, Ont.
Sigler, Harry	Ottawa, Ont.
Small, Norman Lewis	Norwood, Ont.
Smith, Margaret Alexandra	Uxbridge, Ont.
Snell, Evelyn Dora	MacDonald College, P.Q.
Snelling, Howard Arthur	Welland, Ont.
Sweetman, Nelson Allen	Toronto, Ont.
Tape, Muriel Louise	Port Hope, Ont.
Taylor, Agnes Grace	Eganville, Ont.
Timmins, Preston Irwin	Oshawa, Ont.
Truscott, Marion Ila	Kingston, Ont.
Tully, Mary Helen	Pictou, Ont.
Turnbull, Elgin George	Sarnia, Ont.
Vout, Theodore Robert	Ottawa, Ont.
Warren, Ralph Barclay	Eganville, Ont.
Watt, Daniel Grey	Ottawa, Ont.
White, Frank Laidlaw	St. Mary's, Ont.
White, Thomas Clement	Sarnia, Ont.
Winckler, Elizabeth May Lange	Copper Cliff, Ont.

Degree of B.Com.

Abramsky, Eva	Kingston, Ont.
Anglin, Andrew Arnold	Toronto, Ont.
Brooks, Murray Newcombe	Grenfell, Sask.
Burnett, Evangeline Isadora	Ottawa, Ont.
Campbell, Reginald	Trenton, Ont.
Carter, Ernest Edward	Thomasburg, Ont.
Child, Arthur James Edward	Gananoque, Ont.
Coon, Charles R.	Windsor, Ont.
Dodd, Edward Gordon	Sudbury, Ont.
Engler, Aileen	Ottawa, Ont.
Gauld, Thomas Rankin	Stamford, Ont.
Hart, Harry Leonard	Meaford, Ont.
Konkle, Frank Hardy	Burlington, Ont.
McDonald, Elizabeth Eileen	Sarnia, Ont.
McNeil, Robert Campbell	Brandon, Man.
Popkin, John William	Brandon, Man.
Saunders, Graydon Deering	Orillia, Ont.
Smith, Douglas Archibald	Kingston, Ont.
Wren, Donald Stewart	Peterboro, Ont.
Wright, Myrtle M.	Chesley, Ont.

SCHOLARSHIPS AND PRIZES

Robert Bruce Scholarship	Wendal A. Alexander, Shawville, P.Q.
McIver Scholarship	Elsie Williamson, Kingston, Ont.
MacIennan Scholarship in Greek 2	Alice Babcock, Picton, Ont.
Sir Wilfrid Laurier Memorial Scholarship in French Conversation	Charles O'Reilly, Ottawa, Ont.
Alexander Laird Scholarship in English 1.	Anne Brodie, Quebec, P.Q.
Andrew Haydon Scholarship in Colonial History	Winchester, Ont.
W. M. O. Lothead Scholarship in Econo- mics 1	William H. Agnew, Ralph F. Beach, Bridgeburg, Ont.
Adam Shortt Scholarship in Economics 2.	Harry T. Davoud, Kingston, Ont.
P. D. Ross Scholarship in Commerce.	Griffith B. MacDonald, Listowel, Ont.
N. F. Dupuis Scholarship in Mathematics 1.	Alice G. Wood, Marvelville, Ont.
William Moffatt Scholarship in first year Chemistry	John G. McNab, Renfrew, Ont.
Arts '15 Scholarship	Eva McMahon, Hanover, Ont.
Special Prizes in Greek A—	
1st	Sanford McDonald, Gananoque, Ont.
2nd.	Roger C. Nunn, Hamilton, Ont.

Mary Fraser McLellan Prize in Hebrew	Horatio Todd,	Belfast, Ireland
Special Prize in German	Walter F. 'C. Ade,	Ottawa, Ont.
Special Prize in French	Sister Blanche Le Couffe,	Arichat, N.S.
Special Prize in Spanish	Allan F. Cliff,	Kingston, Ont.
James C. Rogers Prize in English	Margaret Fyfe,	Kingston, Ont.
McIlquham Foundation in English	Mae Locklin,	Toronto, Ont.
Gowan Foundation No. I	James S. Craig,	Ottawa, Ont.
Gowan Foundation No. II	J. M. B. Corkill,	Napanee, Ont.
Gowan Foundation No. III	Howard C. Scharfe,	Ottawa, Ont.

MEDALS

Medal in Latin	John H. Stewart,	Osgoode Station, Ont.
Medal in Greek	John H. Stewart,	Osgoode Station, Ont.
Medal in German	Dorothy C. Bamforth,	Peterborough, Ont.
Medal in English	Gerald W. L. Nicholson,	Foam Lake, Sask.
Medal in History	Graeme Falkner,	Ogdensburg, N.Y.
Medal in Economics	James S. Craig,	Ottawa, Ont.
Medal in Mathematics	Harold D. Heffernan,	Athens, Ont.
Medal in Physics	William J. Henderson,	Wingham, Ont.
Medal in Biology	Percival L. MacLachlan,	Kemptville, Ont.

FELLOWSHIPS

ARTS RESEARCH FELLOWSHIPS—

Travelling:

Sarah Common,	
Esterhazy, Saskatchewan	Value \$500.

Resident:

William J. Henderson,	
Wingham, Ontario	Value \$375.
Percival L. MacLachlan,	
Kemptville, Ontario	Value \$375.
Edith Ashcroft,	
Kingston, Ontario	Value \$250.

UNIVERSITY PUBLICATIONS

The following publications are issued by the University and, except where a price is mentioned, will be sent free of charge to all applicants.

CALENDAR OF THE FACULTY OF ARTS.

COURSES IN COMMERCE AND ADMINISTRATION.

CALENDAR OF THE FACULTY OF APPLIED SCIENCE.

CALENDAR OF THE FACULTY OF MEDICINE.

CALENDAR OF QUEEN'S THEOLOGICAL COLLEGE.

ANNOUNCEMENT OF THE SUMMER SCHOOL.

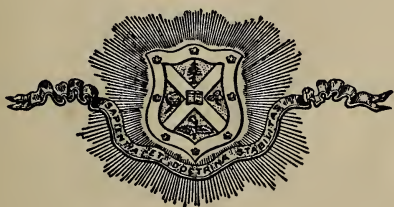
REQUIREMENTS FOR MATRICULATION.

ILLUSTRATED PAMPHLET.

EXAMINATION PAPERS. (Arts, 50 cents; Science and Medicine, each 25 cents.

QUEEN'S UNIVERSITY

KINGSTON, CANADA



Supplement to the Calendar of the Faculty of Arts

for 1932-'33

(with Time-table)



NINETY-SECOND SESSION

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Supplement to the Calendar of the Faculty of Arts for 1932-'33

(with Time-table)



NINETY-SECOND SESSION

LE3. Q9A14

1932/33

Supp.

DETAILS OF COURSES IN HONOURS LEADING TO THE DEGREE OF B.A.

This pamphlet is issued in accordance with the announcement made in the regular calendar in the spring. It is supplementary to the latter and is not intended to be complete in itself. It contains only such details as were previously omitted.

General regulations and prescriptions of pass courses are not included and details of courses leading to the degree of M.A. are included only when they give information not already announced.

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LATIN

LATIN 10. FOUNDATION COURSE FOR FURTHER HONOURS IN LATIN.

Elementary morphology and syntax.

Latin Prose Composition.

Texts:

Cicero, *In Catilinam*, Wilkins (London, Macmillan).

Sallust, *Capes* (Oxford, Clarendon Press).

Virgil, *P. Vergili Maronis Opera*. Sidgwick (Cambridge University Press, 2 vols.).

Professor Tracy.

LATIN 11.

Texts:

Plautus, *Captivi*, *Sonnenschein* (London, Swan, Sonnenschein & Co.).

Terence, *The Comedies of Terence*. Ashmore (Oxford University Press).

Cicero, *De Officiis*, Holden (Complete edition, Cambridge University Press).

Miss Macdonnell.

Tacitus, *Agricola*, Furneaux and Anderson (Oxford University Press).

Professor Jolliffe.

LATIN 16.

Texts:

Catullus, Merrill (Boston: Ginn & Co.).

Miss Macdonnell.

Horace, *The Odes and Epodes*, Shorey and Laing (Boston: B. H. Sanborn & Co.).

Professor Jolliffe.

Caesar, *C. Iuli Caesaris Commentarii Rerum in Gallia Gestarum vii*, T. Rice Holmes (Oxford: University Press).

Professor Jolliffe.

Latin Prose Composition: a weekly exercise will be assigned.

Miss Macdonnell and Dr. Shurtleff.

LATIN 21.

Texts:

Virgil, *P. Vergili Maronis Opera* (Sidgwick, Cambridge University Press, 2 vols.).

Professor Jolliffe.

Lucretius, *Book I*, J. D. Duff (Cambridge: University Press).
Book III, J. D. Duff (Cambridge: University Press).
Professor Tracy.

Cicero, *Select Letters*, How (Oxford: University Press; 2 vols.).
Professor Jolliffe.

LATIN 22.

Texts:•

Horace, *Satires*, Palmer (London: Macmillan).

Horace, *Epistles*, Wilkins (London: Macmillan).

Professor Jolliffe.

Tacitus, *Annals I-IV*, Furnaux (Oxford: Clarendon Press).

Dr. Shurtleff.

Juvenal, *D. Iunii Iuvenalis Saturae XIV* (Duff: Cambridge, University Press).

Professor Jolliffe.

GREEK

GREEK 10.

Texts:

Plutarch, *Themistocles*, Holden (London: Macmillan & Co.).

Homer, *Odyssey* I-XII, Merry (Oxford: Clarendon Press).

Professor Tracy.

GREEK 12.

• Texts:

Herodotus, *Book VIII*, Shuckburgh (Cambridge: University Press).

Thucydides, *Book I*, Marchant (London: Macmillan).

Thucydides, *Book II*, Marchant (London: Macmillan).

Miss Macdonnell.

Aristophanes, *Acharnians*, Merry (Oxford: Clarendon Press).

Knights, Merry (Oxford: Clarendon Press).

Professor Callander.

Greek Prose Composition.

Greek History.

Professor Callandr.

GREEK 13.

Texts:

Demosthenes, *Olynthiacs*, Abbott and Matheson (Oxford: Clarendon Press).

Miss Macdonnell.

Sophocles, *Antigone*, Jebb (Abridged edition; Cambridge, Pitt Press).

Professor Jolliffe.

Plato, *Republic*, Vol. I, Adam (Cambridge: University Press).

Professor Tracy.

GREEK 14.

Texts:

Plato, *Gorgias*, Lodge (Boston: Ginn & Co.).

Professor Callander.

Aristotle, *Ethics*, Burnet (London: Methuen & Co.).

N.B.—This text is out of print, but is procurable in second-hand editions from the English booksellers, Blackwell (Oxford) or Galloway and Porter (Cambridge).

Professor Tracy.

Aeschylus, *Agamemnon*, Sidgwick (Oxford: Clarendon Press).

Professor Callander.

GERMAN

GERMAN 10. GERMAN REALIEN.

GERMAN 12. SURVEY OF GERMAN LITERATURE AND HISTORY.

GERMAN 14a. LESSING'S LIFE AND WORKS.

Text-books:

Löschhorn, *Lessings Leben und Werke* (Velhagen).

Franz, *Hilfsbuch zu Lessing* (Velhagen).

Lessing, *Emilia Galotti* (Heath), *Nathan der Weise* (Ginn).

Hamburgische Dramaturgie, selections (Holt), Laokoon (Oxford).

GERMAN 15b. GOETHE'S LIFE AND WORKS.

Text-books:

Goethe, *Faust I.* (Heath), *Iphigenie auf Tauris* (Holt), *Torquato Tasso* (Ginn), *Egmont* (Holt), *Poems, selections* (Holt), *Leiden des Jungen Werthers* (Oxford).

Books of reference:

Bielschowsky, Goethe, tr. by William Cowper (Putnam's).

Meyer, R. M. Goethe.

GERMAN 22a. HISTORY OF THE GERMAN LANGUAGE.

This course outlines the origin of the Germanic languages and the development of Modern High German. It is intended to serve as an introduction to a study of the older dialects. The development of inflectional endings, prefixes, and suffixes and their meanings, phonology and syntax will be stressed.

Text-book:

Diekhoff, *The German Language* (Oxford).

References:

Wright, *Historical German Grammar*.

Lyon, *Handbuch der deutschen Sprache*, II (Teubner).

Kirk, *Historical Study of New High German* (Longmans).

GERMAN 23b. ADVANCED GERMAN COMPOSITION.

Text-books:

Pope, *Writing and Speaking German*, New Series (Holt).

Hastings, *Studies of German Words and their Uses* (Heath).

Chamberlin, *Advanced Selections for Sight Translations*

(Heath).

Carrington and Holzwarth, *German Composition* (Heath).

FRENCH

FRENCH 11. (a) EXPLICATION DE TEXTES

- Renan, *Souvenirs d'enfance et de jeunesse* (Nelson).
 Pailleron, *Le monde où l'on s'ennuie* (Calmann Levy).
 Hémon, *Maria Chapdelaine* (Renaissance du Livre).
Oxford Book of French Verse.
 Modern French Prose (Nelson).
 Moore and Slight, *Intermediate French Course*, Part III
 (Blackie).
 Ritchie and Moore, *Manual of French Composition* (Cambridge
 University Press).
La Petit Larousse Illustré.

Professor Tirol.

(b) SURVEY COURSE. HISTORY AND LITERATURE.

Professor Campbell.

FRENCH 12. NINETEENTH CENTURY LITERATURE (1800-1850).

- Chateaubriand, *Atala* (Heath).
 V. Hugo, *Notre Dame* (Nelson).
Ruy Blas (Holt).
 Michelet, *Jeanne d'Arc* (Hachette).
 Balzac, *Le Curé de Tours* (Heath).
Oxford Book of French Verse.

Professor Conacher.

FRENCH 20t. LATER NINETEENTH CENTURY LITERATURE.

- Taine, *L'Ancien Régime* (ed. Giese, Heath).
 Flaubert, *Un Coeur simple*. (Nelson).
 Zola, *La Débâcle* (Heath).
 Loti, *Pêcheur d'Islande* (Holt).
 Mirbeau, *Les affaires sont les affaires* (Fayard).

Professor Conacher.

FRENCH 21t. EXPLICATION DE TEXTES MODERNES.

- Boylesve, *L'enfant à la Balustrade* (Nelson).
 Constantin-Weyer, *Un homme qui se penche sur son passé*
 (Fayard).
 J. Renard, *Théâtre complet* (Fayard).
Oxford Book of French Verse.
French Prose of To-day (Sidgwick and Jackson).
 Ritchie and Moore, *Manual of French Composition*, (Cambridge
 University Press).

Professor Tirol.

FRENCH 22t. DRAMATIC THEORY AND FRENCH CLASSICAL TRAGEDY.

Corneille, *Horace* (Heath).Racine, *Iphigénie* (American Book Company).

Professor Campbell.

FRENCH 24. (a) FRENCH LIFE AND ART.

Professor Campbell.

(b) LA LANGUE FRANCAISE DEPUIS LA GUERRE.

Proust, *Morceaux choisis* (N.R.F.).Valéry, *Morceaux choisis* (N.R.F.).*French Verse of To-day* (Sidgwick and Jackson).Ritchie and Moore, *Manual of French Composition*.

Professor Tirol.

SPANISH

SPANISH 10. MODERN AUTHORS.

- Alarcón, *El Sombrero de tres picos* (Holt).
Quintero, *Puebla de las mujeres* (Century).
 Asi se escribe la historia (Crofts).
Ibanèz, *La Barraca* (Holt).
Valdés, *La Hermana San Sulpicio* (Ginn).
Sierra. *Sol de la tarde* (Heath).

SPANISH 22. DRAMA OF THE GOLDEN AGE.

- Lope, Tirso, Alarcón, Calderón.
Alternate years only.
Offered in 1932-33.

SPANISH 30. RENNAISSANCE AND THE*ROMANTIC PERIOD. THE PICAR- ESQUE NOVEL.

ENGLISH

ENGLISH 10. AN INTRODUCTION TO HONOURS IN ENGLISH.

To be taken during the same year as English 2. A general study of the history of the English language, of verse-forms, and of the elementary principles of literary criticism.

Prescribed texts as in English 2, together with the following:

Greenough and Kittredge, *Words and their Ways in English Speech* (London and Toronto: The Macmillan Company).

A. R. Entwistle, *The Study of Poetry* (Toronto: Thomas Nelson and Sons).

E. A. Greening Lamborn, *The Rudiments of Criticism* (Toronto: Oxford University Press).

Professor Alexander (first term) and Professor Clarke (second term).

ENGLISH 14. OLD AND MIDDLE ENGLISH.

Old and Middle English Language and Literature, exclusive of Chaucer.

Prescribed texts:

Krapp and Kennedy, *An Anglo-Saxon Reader* (New York: Henry Holt and Company).

R. Morris, *Specimens of Early English*, Vol. I. (Toronto: Oxford University Press).

Professor Alexander.

ENGLISH 18. SHAKESPEARE.

A review of the environment and life of Shakespeare, and of his development as a dramatist, with lectures on the lives and works of his chief forerunners and contemporaries. In the study of Shakespeare's works his chief comedies will be first considered, and thereafter his tragedies and last plays.

Prescribed texts:

J. W. MacKail, *The Approach to Shakespeare* (Toronto: Oxford University Press).

J. Q. Adams, *The Life of William Shakespeare*, Student's edition. (Boston: Houghton Mifflin Company).

Shakespeare's Comedies; Shakespeare's Historical Plays; Shakespeare's Tragedies, Everyman edition. (Toronto: J. M. Dent and Sons).

A. C. Bradley, *Shakespearean Tragedy* (New York and Toronto: The Macmillan Co.).

Professor Clarke.

ENGLISH 16a. CHAUCER, SPENSER AND MILTON.

This course is concerned chiefly with the poetry of Chaucer, Spenser and Milton, but it includes a study of poets between Chaucer and Spenser, and also of the Elizabethan and Seventeenth Century lyric and of some prose criticism. A study of Chaucer's development as a poet based on the following works: *The Romaunt of the Rose*, *Book of the Duchesse*, *Parlement of Foules*, *Troilus and Criseyde*, *House of Fame*, *Prologue to the Legend of Good Women*, *The Canterbury Tales*.

Prescribed texts:

The Works of Chaucer. (Toronto: Oxford University Press).
The Nun's Priest's Tale, edited by K. Sisam. (Toronto: Oxford University Press).

Grace Hadow, *Chaucer and his Times*, Home University Library. (New York: Henry Holt and Company).

Edmund Spenser, *Poems*. (Any edition, preferably that published by the Oxford University Press).

John Milton, *Poems*. (Any edition, preferably that published by the Oxford University Press).

John Milton, *Areopagitica*. (Toronto: Oxford University Press).

Any anthology of English verse (such as the *Oxford Book of English Verse*).

Metaphysical Lyrics and Poems of the Seventeenth Century, edited by H. J. C. Grierson. (Toronto: Oxford University Press).

Recommended reading: Emile Léguais, *Spenser*; *A Milton Handbook*, by J. H. Handford (New York: F. S. Crofts and Company); *Selected Essays of John Milton*, edited by Laura E. Lockwood (Boston: Houghton Mifflin Company).

Professor Gordon.

ENGLISH 19b. THE CLASSICAL AGE.

English Literature from 1670 to 1780.

Students are expected to show a knowledge of the chief poems of Dryden, Pope, Prior, Gay, Young, Thomson, Dyer, Gray, Collins, Johnson, Goldsmith, Cowper; the following novels: Richard-

son, *Pamela*; Fielding, *Jonathan Wild*; Smollett, *Humphrey Clinker*; and Sterne, *The Sentimental Journey*; Addison, *Selections*, ed. Arnold; Steele, *Selections*, ed. by Austin Dobson; Swift, *Tale of a Tub* and *Gulliver's Travels*; Johnson, *The Rambler* (selections), *Rasselas* and chief *Lives of the Poets*; Burke, *Two Speeches on America* and *Reflections on the French Revolution*; Gibbon, *Autobiography* and *Decline and Fall of the Roman Empire*, Chapters 1-3, 22-24; *Letters* of Dorothy Osborne, Swift, Lady Mary Wortley Montague, Horace Walpole, Gray and Chesterfield.

Criticism: History of English criticism, diction and prosody. Students should be familiar with such critical texts as Aristotle's *Poetics*; Horace's *Ars Poetica*; Sidney's *Defence of Poesy*; Dryden's *Essay of Dramatic Poesy* and other critical essays; Addison's critical essays; Johnson's *Lives of the Poets*; Hurd's *Letters on Romance*.

The Classical Background of English Literature:—Greek and Latin Epic Poetry; Greek and Latin Pastoral Poetry; Latin Satire; Greek and Latin Rhetoric and Poetics; Classical Mythology; Greek and Latin Tragedy.

Prescribed texts:

- O. Smeaton, *English Satires* (Toronto: Blackie and Son).
- John Bailey, *A Shorter Boswell*. (Toronto: Thomas Nelson and Sons).
- Guy Boas, *Gray, Collins, Goldsmith and Cowper* (Toronto: Thomas Nelson and Sons).
- Sir Leslie Stephen, *English Literature and Society in the Eighteenth Century*. (London: Duckworth).
- Dryden, *Poems*. (Oxford edition).
- Pope, *Poems* (Globe edition.) (New York and Toronto: The Macmillan Co.).
- W. C. Hazlitt, *Lectures on the English Poets*, Everyman edition. (Toronto: J. M. Dent and Sons).

Professor Roy.

ENGLISH 20. ENGLISH LITERATURE FROM 1780 TO 1832.

Students are expected to show a knowledge of Blake's *Lyrics*; Burns' *Poems*; Crabbe's *The Borough* and *The Library*; Coleridge and Wordsworth, *Poems*; Scott and Southey, *Poems*; Byron, *Manfred*, *Cain*, *Vision of Judgment*, and *Lyrics*; Shelley: *Prometheus Unbound*, *Adonais*, and *Lyrics*; Keats, *Poems*; Scott, *Old Mortality*, *Heart of Midlothian*, and *Redgauntlet*; Lamb, *Essays of Elia*; Hazlitt, *Spirit of the Age* and *Table Talk*; De Quincey,

Opium Eater; Dorothy Wordsworth, *Journal*; Hunt's *Autobiography*, Moore's *Diary*; Letters of Wordsworth, Byron, Shelley, Keats.

Criticism. Wordsworth's *Preface*; Coleridge, *Biographia Literaria*, Chaps. XIV-XXII.

Prescribed texts:

English Critical Essays of the Nineteenth Century. (Toronto: Oxford University Press).

Ernest Bernbaum, *Guide Through the Romantic Movement*, Vol. I, (Toronto: Thomas Nelson and Sons).

Guy Boas, *Wordsworth and Coleridge Contrasted*. (Toronto: Thomas Nelson and Sons).

Guy Boas, *Keats and Shelley Contrasted*. (Toronto: Thomas Nelson and Sons).

H. N. Brailsford, *Shelley, Godwin and their Circle*, Home University Library. (New York: Henry Holt and Company).

W. C. Hazlitt, *The Spirit of the Age*, Everyman edition. (Toronto: J. M. Dent and Sons).

William Wordsworth, *Poems*. (Oxford edition).

Any editions of the Poetical Works of Coleridge, Scott, Byron, Shelley and Keats.

Professor Roy.

ENGLISH 22. THE VICTORIAN AND GEORGIAN PERIODS.

English Literature from 1837 to the Present.

Students are expected to become familiar with the following: Poems of Walter Savage Landor, Thomas Hood, William Barnes; Tennyson: *In Memoriam*, *Idylls of the King*, *Maud*, *The Locksley Hall* poems, *The Lotos Eaters*, *Ode on the Death of the Duke of Wellington*, *Saint Simeon Stylites*, *The Palace of Art*, *The Princess*, *Ulysses*, etc.; Robert Browning: *Paracelsus*, *Strafford*, *Pippa Passes*, *A Blot in the 'Scutcheon*, *The Ring and the Book* (Books I, V, VI, VII, X, XI, XII), *Saul*, *Any Wife to Any Husband*, *My Last Duchess*, *The Flight of the Duchess*, *The Italian in England*, *The Englishman in Italy*, *A Grammarian's Funeral*, *Childe Roland to the Dark Tower Came*, *How It Strikes a Contemporary*, *An Epistle, Fra Lippo Lippi*, *Andrea del Sarto*, *Abt Vogler*, *Rabbi ben Ezra*, *Caliban upon Setebos*, etc.; Elizabeth Barrett Browning: *Cowper's Grave*, *Sonnets from the Portuguese*, *Casa Guidi Windows*, *A Vision of Poets*, *The Dead Pan*, portions of *Aurora Leigh*; Edward Fitzgerald: *Rubaiyat of Omer Khayyam*; Poems of Matthew Arnold, Arthur Hugh Clough, Coventry Patmore, Sydney Dobell, Dante Gabriel Rossetti, Chris-

tina Georgina Rossetti, George Meredith, Jean Ingelow, Thomas Edward Brown, William Morris, A. C. Swinburne; Thomas Hardy; *Poems* (selected by himself); portions of *The Dynasts*; selections from Austin Dobson, Arthur O'Shaughnessy, Robert Bridges (including *The Testament of Beauty*), W. E. Henley, R. L. Stevenson, John Davidson, Sir William Watson, Francis Thompson, Alice Meynell, Sir Henry Newbolt, W. B. Yeats, Rudyard Kipling, Lionel Johnson, G. W. Russell, Laurence Binyon, Alfred Noyes, A. E. Housman, Walter de la Mare, John Masefield (including *Dauber*), Rupert Brooke, W. H. Davies, W. W. Gibson.

Landor: *Imaginary Conversations* (selected); Macaulay: selected essays; J. H. Newman: portions of *The Idea of a University, Literature*; Carlyle: *Essay on Burns*, portions of *Sartor Resartus, Heroes and Hero-Worship, The French Revolution and Past and Present*; Thackeray: *Henry Esmond, The Virginians*; Ruskin: portions of *Modern Painters, The Stones of Venice, and The Crown of Wild Olive*; Matthew Arnold: *Hebraism and Hellenism, Sweetness and Light, Literature and Science, Wordsworth*; Huxley: *A Liberal Education, Science and Culture*; Pater: *Style, Romanticism, The Child in the House*; Stevenson: *Selected Essays*; Dickens: *Bleak House, Great Expectations*; George Eliot: *Middlemarch*; Meredith: *The Ordeal of Richard Feverel*; Hardy: *Tess of the D'Urbervilles, The Return of the Native*; Moore: *Esther Waters*; Conrad: *The Rescue*; Galsworthy: *The Forsyte Saga*; Wells: *Kipps*; Walpole: *Fortitude*; De Morgan: *Joseph Vance*; Masefield: *Multitude and Solitude*.

Prescribed texts:

The World's Classics, Nos. 19, 146, 153, 223. (Toronto: Oxford University Press).

Everyman Series, Nos. 225, 458, 723, 765. (Toronto: J. M. Dent and Sons).

English Prose of the Nineteenth Century, edited by H. Craig and J. M. Thomas. (New York: F. S. Crofts and Company).

Sir A. Quiller-Couch. *The Oxford Book of Victorian Verse*. (Toronto: Oxford University Press).

Any editions of the Poetical Works of Tennyson, Clough, Arnold, Browning, Rossetti and Swinburne.

Professor Clarke.

HISTORY

HISTORY 12. MEDIAEVAL EUROPEAN HISTORY, 300-1453.

The following subjects will be discussed in the lectures:—The Decline of Roman Civilization and Government in the West; the Barbarian Invasions; the Germanic Kingdoms; Monasticism, the Papacy, and the Expansion of the Church; the Rise of the Frankish Empire; the New Invaders—Norsemen, Magyars, Saracens; The Holy Roman Empire; the Capetian Monarchy; Cluny, Hildebrand, and the Investiture Controversy; Feudalism, Chivalry, the Crusades; the Hundred Years' War; Towns and Economic Development; the Universities, the Friars, the Scholastics; the Conciliar Movement; Mediaeval Architecture.

Texts:

H. W. C. Davis, *Mediaeval Europe* (Home University Library).

D. C. Munro and R. J. Sontag, *The Middle Ages*, 395-1500 (Century).

Thatcher and McNeal, *Source Book of Mediaeval History* (Scribners), or R. Y. D. Laffan, *Select Documents of European History*, Vol. I, 800-1492 (Methuen).

For extra-mural students the following text is also required:

J. Bryce, *Holy Roman Empire* (Macmillan).

Professor Prince.

HISTORY 13. THE DEVELOPMENT OF BRITISH COLONIAL POLICY.

The following subjects will be discussed in the lectures: The causes of early overseas settlement; the relation of the colonies to the crown and parliament; the colonial policy of Cromwell; the restoration and extension of royal government; the revolution of 1688 and colonial policy; the governor and colonial assemblies; the causes of the loss of the American colonies; the influence of the American situation on British colonial policy; the Industrial Revolution and emigration; settlement in Australia and New Zealand; Gibbon Wakefield; the problem of colonial self-government in the West Indies, Canada, Australia, New Zealand, and South Africa; the expansion of the Empire; the Empire and British foreign policy; India, Egypt and the Near East; the government of the Empire; the Colonial and Imperial Conferences, the League of Nations and the Empire; The Imperial Conference of 1926.

Texts:

Robinson, *The Development of the British Empire* (Houghton Mifflin).

H. E. Egerton, *A Short History of British Colonial Policy* (Methuen).

G. L. Beer, *The Origins of the British Colonial System, 1578-1660* (Macmillan).

The Old Colonial System (Macmillan).

British Colonial Policy, 1754-1765 (Macmillan).

H. E. Egerton, *The American Revolution* (Oxford).

A. B. Keith, *Selected Speeches and Documents on British Colonial Policy, 1763-1917* (Oxford).

H. E. Egerton, *British Colonial Policy in the Twentieth Century* (Methuen).

Books of reference:

The Cambridge History of the British Empire.

Professor McArthur.

HISTORY 15a. THE NEAR EASTERN QUESTION.

A study in the relations between the Occident and Orient, Christianity and Islam. The topics discussed will include the following: The Byzantine Empire and its eclipse by the Turks; Europe's peril from the Ottoman, and the "Crusades" of Spain, Austria and Russia; the dismemberment of Turkey by Balkan nationalism; the Congress of Berlin; German imperialism and the "Young Turks"; the Balkan Wars; Turkey and the Great War; the Arab revival; Zionism and Palestine; the Kemal "Nationalists" movement and Lausanne; the rebirth of Turkey; the revolt of Islam against Western European control.

Texts:

J. A. R. Marriott, *The Eastern Question* (Oxford University Press).

A. J. Toynbee and K. P. Kirkwood, *Turkey* (Scribners).

Professor Prince.

HISTORY 16. MEDIAEVAL ENGLISH HISTORY.

An introductory study of the development of England and English institutions up to 1485. The topics discussed will include the following: Early invaders; the Romans in Britain; the Teutonic conquest and settlement; the origins and growth of the Anglo-Saxon constitution; the Danes and Alfred the Great; the Norman Conquest; Church and State; Feudal institutions; the rise of Parliament; the development of the administrative system; Edwardian wars against Scotland and France; the Lancastrian Constitutional experiment; the Lollards; the Wars of the Roses; social England in the later Middle Ages.

Texts:

- T. F. Tout, *Advanced History of Great Britain*, Pt. I.
 G. B. Adams, *Constitutional History of England* (Holt), or
 T. P. Taswell-Langmead, *English Constitutional History*, or
 D. J. Medley, *Student's Manual of English Constitutional History*.
 G. B. Adams and H. M. Stephens, *Select Document of English Constitutional History* (Macmillan).

For extra-mural students the following books are also required:

- W. T. Morgan, *A Guide to the Study of English History* (Knopf).
 C. Petit-Dutaillis, *Studies Supplementary to Stubbs' Constitutional History*, Vol. 1 (Manchester).

Professor Prince.

HISTORY 17. BRITISH HISTORY SINCE 1815.

The lectures will deal with such topics as the following: England in transition; the Napoleonic era; Social and political problems of the peace; the era of Reform; British Foreign Policy and the European Powers; the new age of industrialism and the vicissitudes of Agriculture; the great political leaders of the period and the development of the political parties; problems of Ireland; Imperialism; the parliamentary system and the extension of the franchise; the machinery of government and the industrial state; the Labour movement; problems of urbanization; foreign affairs and British diplomacy to the Great War; peace and reconstruction.

Text:

J. A. R. Marriott, *England since Waterloo*.

Books for special reference and general reading will be recommended during the course.

Mr. Harrison.

HISTORY 18a. ENGLAND UNDER THE TUDORS, 1485-1603.

The following subjects will be discussed in the lectures: The nature of the Tudor "popular absolutism"; Henry VII and the establishment of strong government; the New Learning and the Oxford Reformers; Henry VIII and the revolt from Rome; the Protestant Reformation under Edward VI; the restoration of Catholicism under Mary; Elizabeth's ecclesiastical "middle way"; Elizabeth as a diplomatist; Elizabeth and Mary Queen of Scots and the Catholic Revival; the Tudor navy and maritime activity; Philip II and the Spanish Armada; commercial and colonial enterprise; social and economic progress at home; the Irish problem under the later

Tudors; the "Age of Shakespeare"; the beginnings of Puritanism and parliamentary resistance to autocracy.

Texts:

- H. A. L. Fisher, *Political History of England, 1485-1547* (Longmans).
- A. F. Pollard, *Political History of England, 1547-1603* (Longmans).
- G. B. Adams and H. M. Stephens, *Select Documents of English Constitutional History* (Macmillan).
- R. B. Morgan, *Readings in English Social History*, Vol. III, 1485-1603 (Cambridge University Press).

For extra-mural students the following books are also required:

- W. T. Morgan, *A Guide to the Study of English History* (Knopf).
- T. F. Tout, *Advanced History of Great Britain*, Part II (Longmans).
- G. B. Adams, *Constitutional History of England* (Holt).
- F. W. Tickner, *A Social and Industrial History of England* (Arnold in England, Longmans in Canada).

Professor Trotter.

HISTORY 19b. ENGLAND UNDER THE STUARTS, 1603-1714.

The following subjects will be discussed in the lectures: constitution and nation at the beginning of the seventeenth century; the clash of King and Parliament; the personal rule of Charles I; the Puritan Revolution and the republican experiment under Cromwell; the Stuart Restoration and the Whig Revolution of 1688; the rise of political parties; overseas expansion under the Stuarts; social and cultural aspects of the period.

- G. M. Trevelyan, *England under the Stuarts* (Methuen).
- Sir Charles Firth, *Oliver Cromwell and the Rule of the Puritans in England* (Putnam).
- G. B. Adams and H. M. Stephens, *Select Documents of English Constitutional History* (Macmillan).
- R. B. Morgan, *Readings in English Social History*, Vol. IV, 1603-1688 (Cambridge University Press).

For extra-mural students the following books are also required:

- W. T. Morgan, *A Guide to the Study of English History* (Knopf).
- T. F. Tout, *Advanced History of Great Britain*, Part II (Longmans).

G. B. Adams, *Constitutional History of England* (Holt).
 F. W. Tickner, *A Social and Industrial History of England*.

Professor Trotter.

HISTORY 20a. THE BASIS OF FRENCH CANADIAN NATIONALITY: a study of French civilization in Canada in the seventeenth and eighteenth centuries.

This course will deal with: The French institutions in Church and State transferred to Canada in the 17th century; the Jesuit missions; Laval, and the Roman Catholic Church in Canada; Louis XIV and the colonial policy of Colbert; Talon and Royal control; French feudalism in Canada; the fur trade in relation to the expansion of New France; La Salle and western exploration; the relations between New France and New England; the conflict of interest of France and England in America; the Seven Years' War in America.

The Cambridge History of the British Empire, Vol. VI (Canada, Cambridge University Press).

Munro, *The Seigniorial System in Canada*.

Parkman, *The Pioneers of France in the New World; The Jesuits in North America; The Old Régime; Count Frontenac; La Salle; A Half Century of Conflict; Montcalm and Wolfe*.

And contemporary sources to be assigned in class.

Books of reference on French History (1600-1763):

Grant, *The French Monarchy*.

Lavissee, *Histoire de France*, tomes 6-8.

Lodge, *Richelieu*.

Cambridge, Modern History, Vol. 5, the Age of Louis XIV.

Professor McArthur.

HISTORY 21b. FRENCH AND BRITISH IN CANADA—THE FIRST PHASE, 1760-1812.

This class will deal with: The first days of British rule; the administrations of Murray and Dorchester; the Quebec Act; Canada and the American War; the United Empire Loyalists, their settlement and influence on Canadian development; the Constitutional Act and the division of the Province; Parliamentary institutions in Lower and Upper Canada; the war of 1812.

The Cambridge History of the British Empire, Vol. VI (Canada, Cambridge University Press).

Lucas, *A History of Canada, 1763-1812.*

Shortt and Doughty, *Documents relating to the Constitutional History of Canada, 1759-91.*

Doughty and McArthur, *Documents relating to the Constitutional History of Canada, 1791-1818.*

Chapais, *Cours d'histoire du Canada.*

Books of reference:

Canada and Its Provinces, Vol. 3.

Bradley, *Lord Dorchester.*

Professor McArthur.

HISTORY 24. THE RENAISSANCE.

This course will be conducted as a seminar at an hour to be determined at the beginning of the session. The subjects of discussion will include the more significant aspects of the Renaissance movement in Italy, France, Germany and Britain. As far as possible readings will be selected from the literature of the Renaissance period. Special emphasis will be given to the influence of the movement on art and on religion as illustrated by the Reformation and the counter-Reformation.

Professor Prince.

HISTORY 25b. UNITED STATES HISTORY.

A survey course covering the national period. Emphasis is placed upon constitutional development and such other phases of the growth as help to explain the political and social problems of the present. The following leading national themes are stressed: The structure of the government, foreign relations, the growth of national feeling, the Monroe Doctrine, westward extension, the slavery question, the Civil War, Reconstruction, financial problems, political reforms, labor and capital, the growth and regulation of corporations, the Spanish-American War and territorial expansion, the United States and the World War, the United States since the war.

Hockett and Schlesinger, *Political and Social History of the United States* (Macmillan).

Macdonald, *Documentary Source Book of American History, 1606-1926* (Macmillan).

Professor Trotter.

HISTORY 27. EUROPE SINCE 1815.

The lectures will deal with such topics as the following: The passing of the *ancien régime*; the revolutionary and Napoleonic era;

the Vienna Peace Settlement and the International Congresses; Liberalism and Nationalism; revolution and reaction in the age of Metternich; the restored monarchy in France; the Second Empire; the unification of Italy; the evolution of Imperial Germany; the Hapsburg Monarchy and the Nationalities of Eastern Europe; the problems of Russia; the European Powers and the Eastern Question; Economic development and the new Imperialism; Bismarck and the Alliances; Armaments, Security, and the Great War; the Peace Treaties and the new map of Europe; the League of Nations; the aftermath of war and problems of reconstruction; Internationalism.

Texts:

A. J. Grant and H. W. V. Temperley, *Europe in the Nineteenth Century*.

P. W. Slosson, *Twentieth Century Europe*.

Books for special reference and general reading will be recommended during the course.

Mr. Harrison.

HISTORY 28a. THE STRUGGLE FOR RESPONSIBLE GOVERNMENT IN CANADA, 1812-1849.

This is an advanced course and may be offered as part of the work for the degree of M.A. The lectures and seminars will deal with the following subjects: The social and economic causes of discontent; Robert Gourlay; self-government in the Maritime Provinces; early investigations and proposals of reform; the Constitutional Party; Mackenzie and Papineau; the Rebellion of 1837; the Durham Mission and Report; the Union of the Canadas; Sydenham and reconstruction; liberalism and reaction as represented by Bagot and Metcalfe; the work of Lord Elgin; British policy; the Rebellion Losses Bill and the adoption of the practice of Responsible Government.

Doughty and McArthur, *Documents relating to the Constitutional History of Canada, 1791-1818*.

Lucas, *Lord Durham's Report*, Vols. I and II.

The lives of Mackenzie, Papineau, Baldwin, Lefontaine, Wilmot, Tilley, Hincks, Sydenham, and Elgin in *The Makers of Canada*.

Morison, *British Supremacy and Canadian Self Government* (Gundy).

and other contemporary sources to be assigned during the course.

Professor McArthur.

HISTORY 29b. CANADIAN DEVELOPMENT, SINCE 1849.

The development of party government; economic conditions; Reciprocity with the United States; Canada and the American Civil War; the Confederation Movement—its origin and development; the Canadian Confederation; the problems of the Dominion; Western expansion; railway development; the National Policy; Provincial rights; the rise of Laurier; immigration and expansion; Imperial problems; Canada and the Colonial and Imperial Conferences; the Great War and its influence on Canadian status and development.

This course is open only to honours and graduate students except by special permission of the instructor. It is conducted as a seminar, attention being given to the problem of historical method and to the bibliography of Canadian history for the period studied, and each student presenting to the class reports on special topics based so far as possible upon intensive research in the contemporary sources. In addition to the research on their special topics students are expected to make themselves familiar with the general history of the period, for which purpose they will read with special care the prescribed texts. For such other reading as opportunity affords they are advised to refer specially to such works as those listed below as books of reference.

Required texts:

- R. G. Trotter, *Canadian History: A Syllabus and Guide to Reading* (Macmillan).
- R. G. Trotter, *Canadian Federation: Its Origin and Achievement* (Dent).
- O. D. Skelton, *Life and Letters of Sir Wilfrid Laurier* (Gundy).

Books of reference:

- Cambridge History of the British Empire*, Vol. VI.
- J. Pope, *Memoirs of Sir John A. Macdonald*.
- O. D. Skelton, *Life and Times of Sir A. T. Galt*.
- Isabel Skelton, *Life of Thomas D'Arcy McGee*.
- Lives of men of the period in *The Makers of Canada*.

Professor Trotter.

HISTORY 40a. CANADIAN CONSTITUTIONAL HISTORY, 1760-1867.

The sources of the constitutions of the older Canadian provinces in the law and custom of the constitution of the Atlantic coast colonies; a consideration of the powers of the governor and council in Nova Scotia and Quebec; the introduction of representative government; the functions of the executive council, legislative

council and legislative assembly and the relations between these bodies; the introduction of the practise of parliamentary government; the evolution of the cabinet; party organization in relation to government; change in the position of governor; changes in the constitution of the legislative councils; the powers and mode of operation of the provincial governments at the time of Confederation.

This class will probably be conducted as a seminar at an hour to be arranged at the beginning of the session.

Books of reference:

Shortt and Doughty, *Documents relating to the Constitutional History of Canada*, 1759-1791.

Doughty and McArthur, *Documents relating to the Constitutional History of Canada*, 1791-1818.

Kennedy, *Documents of the Canadian Constitution*, 1759-1915.

Saunders, *Three Premiers of Nova Scotia*.

Confederation Debates and other source materials to be assigned.

Professor McArthur.

POLITICAL AND ECONOMIC SCIENCE

ECONOMICS

ECONOMICS 10b. INTRODUCTION TO ACCOUNTING.

A course in which accounting is introduced as a special type of the quantitative method of analysis. The aim of the course is to give the student an understanding of the principles of accounting and of the methods of summarizing accounting information in periodic balance sheets and income statements,—an understanding sufficient to permit the student to use accounting methods as a tool in economic analysis. The course is not intended to prepare the student for practical work in accountancy.

Assigned Readings.

Professor Curtis.

ECONCMICS 11a (19b). INTRODUCTION TO STATISTICS.

A course in the collection, analysis, and charting of statistical data. Special attention will be given to graphic and diagrammatic presentation.

Mills, *Statistical Methods* (Holt).

Professor Curtis.

ECONOMICS 12 (25a, 23b). MONEY, BANKING AND INTERNATIONAL TRADE.

A general survey of the modern financial system. Money and credit, commercial banks, investment banks, trust companies, savings banks, loan and mortgage companies, co-operative credit institutions, stock exchanges and the other institutions which make up the present financial structure, will be studied with a view to ascertaining the functions which they perform, their relations to one another and to the economic system as a whole. A brief comparative study of the commercial banking systems of England, Scotland, France, Germany, United States, and Canada will also be made. Theory of international trade, foreign exchanges, international price changes, and tariff problems.

Texts:

Dunbar, *The Theory and History of Banking* (G. P. Putnam's Sons, New York and London).

The Canadian Bank Act.

Burgess, *Federal Reserve Banks and the Money Market* (Harpers).

Readings in Money and Banking furnished through the Department.

Taussig, *International Trade*.

Extra-mural students should also obtain

Moulton, *Financial Organization of Society* (The University of Chicago Press).

Lehfeldt, *Money* (Oxford University Press).

Professor Knox.

ECONOMICS 14. ECONOMIC HISTORY AND GEOGRAPHY.

An Honours course to be offered as part of a minor in Political and Economic Science. Students will attend the lectures in Economics 4.

Assigned Readings.

ECONOMICS 15 (10). MODERN ECONOMIC THEORY.

A discussion course based on Cassell and Marshall. The general history of economic thought since Adam Smith will be included.

Gide and Rist, *History of Economic Doctrines* (Heath).

Cassell, *Theory of Social Economy* (Harcourt, Brace).

Marshall, *Principles of Economics* (Macmillan).

Professor Mackintosh.

ECONOMICS 16t. INTERNATIONAL ECONOMIC RELATIONS.

Theory of international trade and tariffs, history of international economic relations since the industrial revolution; current problems.

Taussig, *International Trade* (Macmillan).

Professor Knox.

ECONOMICS 17. ECONOMIC HISTORY OF CANADA AND THE UNITED STATES.

A lecture course (one hour each week) associated with Economics R 2. Lectures will be devoted to interpretation of the economic development of new communities.

Professor Mackintosh.

ECONOMICS 20. BUSINESS CYCLES AND MONETARY THEORY.

A seminar course dealing with the economic problems of a dynamic society with special attention to monetary factors.

Keynes, *A Treatise on Money* (Harcourt, Brace & Co.).

Mitchell, *Business Cycles* (National Bureau of Economic Research).

Robertson, *Banking and the Price Level*.

Kuznets, *Secular Movements in Production and Prices* (Houghton-Mifflin).

Professor Clark.

ECONOMICS 21. APPLIED ECONOMICS.

A study of the application of economic analysis to the problems of public and private finance, of transportation, population, monopolies and labour.

Assigned Readings.

Professor Curtis.

POLITICAL AND ECONOMIC SCIENCE

POLITICS 30b. CANADIAN GOVERNMENT AND CONSTITUTIONAL LAW.

A critical and historical study of the governmental institutions of Canada and the British North America Act in particular. To be taken in conjunction with History 40a.

Dawson, *Constitutional Issues in Canada* (Oxford).

Assigned readings.

Selected Cases from Cameron, *The Canadian Constitution and the Judicial Committee*.

Professor Rogers.

POLITICS 32. POLITICAL THEORY (Offered in 1932-33 and in alternate years).

A study of modern political theory, mainly English.

Assigned Readings.

Professor Rogers.

POLITICS 33. ENGLISH CONSTITUTIONAL HISTORY AND LAW.

A lecture course (one hour each week) to be attended in conjunction with Politics R 2.

Professor Rogers.

POLITICS 34. INTERNATIONAL LAW AND ORGANIZATION (Offered in 1933-34 and in alternate years).

POLITICS 35. THE BRITISH COMMONWEALTH OF NATIONS.

A study of the political problems of the countries making up the British Commonwealth of Nations.

Assigned Readings.

Professor Rogers.

PHILOSOPHY

PHILOSOPHY 10. HISTORY OF PHILOSOPHY.

A survey of the major philosophical systems in their historical development. The course will include:

- (a) Ancient Philosophy: Ionians, Eleatics, Atomists; Plato; Aristotle; Stoics and Epicureans;
- (b) Modern Philosophy: Descartes, Spinoza, Leibniz; Locke, Berkeley, Hume; Kant and German Idealism.

Text-books:

Robin, *Greek Thought and the Origins of the Scientific Spirit* (Knopf).

Weber and Perry, *History of Philosophy* (Scribners).

Dr. Vlastos.

PHILOSOPHY 14a. AESTHETICS.

The course aims to introduce the student to the general question of the meaning of beauty and its place in experience. Such questions as the following will be discussed: What is beauty? What is its relation to other fields of experience, such as science, morality, and religion? What are its psychological and sociological origins? What is the special field, method, and contribution of the individual arts, such as poetry, drama, painting, sculpture, architecture, music?

Santayana, *The Sense of Beauty* (Scribners).

Prall, *The Esthetic Judgment* (Crowell).

Dr. Vlastos.

PHILOSOPHY 15b. KANT.

General survey of the Philosophy of Kant with special study of the Critique of Pure Reason.

Kant, *Critique of Pure Reason*, Translation by Norman Kemp Smith (Macmillan).

Prolegomena to any Future Metaphysic, Translation by Mahaffy and Bernard (Macmillan).

Caird, *The Critical Philosophy of Kant* (Jackson, Wylie & Co.).

Kemp Smith, *Commentary to Kant's Critique of Pure Reason* (Macmillan).

Watson, *Kant Explained* (Maclehose).

Paulsen, *Kant* (Fromann's Klassiker der Philosophie).

Pritchard, *Kant's Theory of Knowledge* (Clarendon Press).

Dr. Vlastos.

PHILOSOPHY 22. THE PRINCIPLES OF PSYCHOLOGY.

A systematic presentation of present day psychological doctrine, which is discussed in the light of the experimental evidence. The course involves practical work, the hours of which will be arranged.

Woodworth, *Experimental Psychology* (Scribner).

Keith Lucas, *The Conduction of the Nervous Impulse* (Longmans).

Adrian, *The Basis of Sensation* (Christopher).

Reading is also required in the current literature.

Professor Humphrey.

PHILOSOPHY 23. PSYCHOLOGY OF THE INSTINCTS AND EMOTIONS.

This course is arranged for extra-mural students.

Professor Humphrey.

PHILOSOPHY 24a. ABNORMAL PSYCHOLOGY.

A study of the more modern theories of abnormal mental action, with their relation to normal psychology and everyday mental hygiene.

W. MacDougall, *Abnormal Psychology* (Scribners).

Readings are also required in other texts.

Professor Humphrey.

PHILOSOPHY 26b. HISTORY OF PSYCHOLOGY.

Discusses the solutions that representative psychological thinkers from Greek times to the present day have given of certain persistent problems, such as the relation of the mind to the body and the unity of the mind.

Brett, *History of Psychology*.

Rand, *The Classical Psychologists* (Houghton Mifflin).

Professor Humphrey.

PHILOSOPHY 30. PROBLEMS IN PSYCHOLOGY.

A specific problem of a minor character is taken up experimentally. A comprehensive report will be required, which will exhibit the results of the experimental work and give an account of the previous literature. This course is open for advanced students only, and by permission of the instructor.

Professor Humphrey.

MATHEMATICS

MATHEMATICS 10a. ALGEBRA.

Prerequisite, Mathematics 1.

Hall and Knight, *Higher Algebra* (Macmillan).

Professor Gummer.

MATHEMATICS 11b. CALCULUS.

Open to students who have taken the first half of Mathematics 2.

Granville, Smith and Longley, *Elements of the Differential and Integral Calculus* (Ginn).

Professor Gummer.

MATHEMATICS 12a. DETERMINANTS AND THEORY OF EQUATIONS.

Prerequisites, Mathematics 2, 10a.

Dickson, *First Course in the Theory of Equations* (Wiley).

Professor Johnston.

MATHEMATICS 14a. SPHERICAL TRIGONOMETRY AND ASTRONOMY.

In connection with this course some work will be done in the observatory.

Prerequisite, Mathematics 2.

Baker, *Astronomy* (van Nostrand).

Kingston, *Star Guide*.

Professor Johnston.

MATHEMATICS 15b. ANALYTIC SOLID GEOMETRY.

Open to students who have taken, or are taking, 12a.

Snyder and Sisam, *Analytic Geometry of Space* (Holt).

Professor Gummer.

MATHEMATICS 16b. DIFFERENTIAL EQUATIONS.

Prerequisites, Mathematics 2, 10a, and 11b.

Professor Miller.

HONOURS GROUP A.

MATHEMATICS 17t. ALGEBRA AND FINITE DIFFERENCES.

Hall and Knight, *Higher Algebra* (Macmillan).

Reference:

Whitaker and Robinson, *Calculus of Observations* (Blackie).

Coolidge, *Introduction to Mathematical Probability* (Oxford University Press).

MATHEMATICS 18t. MODERN SYNTHETIC GEOMETRY.

Syllabus of work and references will be supplied in class.

Professor Matheson.

MATHEMATICS 19t. ADVANCED CALCULUS.

Woods, *Advanced Calculus* (Ginn).

Professor Miller.

Graduate courses for M.A. students will be selected from the following:—

MATHEMATICS 21a or b. THEORY OF FUNCTIONS OF A COMPLEX VARIABLE.

Townsend, *Functions of a Complex Variable* (Holt).

MATHEMATICS 22a or b. THEORY OF NUMBERS.

MATHEMATICS 23a or b. MULTIPLE ALGEBRA AND QUATERNIONS.

MATHEMATICS 24a or b. FOURIER SERIES AND SPHERICAL HARMONICS.

MATHEMATICS 25a or b. MATHEMATICAL THEORY OF STATISTICS.

MATHEMATICS 30a or b. THEORY OF INFINITE SERIES.

Knopp, *Theory and Application of Infinite Series*.

MATHEMATICS 31a or b. THEORY OF FUNCTIONS OF A REAL VARIABLE.

Reference:

Goursat-Hedrick, *Mathematical Analysis*, Vol. 1 (Ginn).

Townsend, *Theory of Functions of Real Variables* (Holt).

MATHEMATICS 32a or b. MODERN HIGHER ALGEBRA.

Bôcher, *Introduction to Higher Algebra* (Macmillan).

MATHEMATICS 33a or b. DIFFERENTIAL GEOMETRY.

Eisenhart, *Differential Geometry* (Ginn).

PHYSICS

PHYSICS 11. MECHANICS.

Honour students with second division standing in Physics 1 (or its equivalent as determined by the Department of Physics) may take this class at the same time as Physics 2.

The work of the class is the consideration of the fundamental principles of Mechanics, developing those dealt with in Physics 1 and proceeding to the Mechanics of Impact, Rotation, Simple Harmonic Motion, etc. A large part of the work will be the solution of problems in which the elementary calculus will be freely used.

Prerequisites—Physics 1 and Mathematics 2. For Pass students Physics 2 is also prerequisite.

Professor W. C. Baker.

PHYSICS 10b. DYNAMICS OF A PARTICLE.

A series of lectures in which the elements of statics and dynamics of a particle are discussed.

Prerequisites—Physics 2 (62%) and Physics 11 (55%).

Professors W. C. Baker and Flammer.

PHYSICS 12a. INTRODUCTION TO THE MATHEMATICAL THEORY OF ELECTRICITY AND MAGNETISM.

Prerequisites—Physics 2 (62%) and Physics 11 (55%).

Professor W. C. Baker.

PHYSICS 13b. ELECTRICITY AND MAGNETISM.

In this course an attempt is made to acquaint the student with some of the modern developments in Physics. Lectures are given on such topics as, The Structure of the Atom, Conduction of Electricity through Gases, Radioactivity and X-rays.

Prerequisites—Physics 2 (62%) and Mathematics 2.

Textbook:

J. A. Crowther, *Ions, Electrons and Ionizing Radiations*.

Professor Clark and Dr. Cave.

PHYSICS 14a. HEAT.

A course on the fundamental laws of Thermodynamics and their application to the Thermodynamical Scale of Temperature, to the

treatment of Saturated Vapours and to Reversible Processes in general.

Prerequisites—Mathematics 2 and Physics 2 (62%).

Professor Clark and Dr. Cave.

PHYSICS 16a. DYNAMICS OF RIGID AND ELASTIC BODIES.

A discussion of Motions of a Rigid Body, Ellipsoids of Inertia, Motion with Fixed Axis and Fixed Point, Euler's Equations, and applications to Motion of the Symmetrical Top. Stress and Strain Relations in Elastic Bodies, Elastic Constants.

Prerequisite—Physics 10b (55%).

Professor Flammer.

PHYSICS 17b. PHYSICAL OPTICS.

A course of lectures on the theory and phenomena of Physical Optics, including a discussion of Wave Motion, Diffraction, Interference Spectroscopes, Spectroscopy, Polarization and Double Refraction.

Prerequisites—55% on each of Physics 10b, 12a, and 13b.

Professor Robertson.

PHYSICS 20b. ELECTRICITY AND MAGNETISM.

Electrodynamics, Conduction through Gases.

Prerequisites—55% each on Physics 10b, 12a and 13b.

Professor Flammer.

PHYSICS 21a. KINETIC THEORY OF GASES.

Prerequisites—55% on each of Physics 10b, 12a, 13b, and 14a.

Textbook:

Bloch, *Kinetic Theory of Gases*.

Professor Gray.

PHYSICS 27 a or b. MECHANICS.

The development and application of such important principles as the Principle of Virtual Work, Principle of d'Alembert, Hamilton's Principle of the Least Action, Lagrange's Equations, and a brief treatment of Non-Newtonian Mechanics.

Professor Flammer.

CHEMISTRY

CHEMISTRY 11b. ADVANCED GENERAL CHEMISTRY.

The work of this course is devoted to the study of the phase rule and its application.

Prerequisite—Chemistry 1, 2, 12, 13, 14.

Professor Frost.

CHEMISTRY 12. ORGANIC CHEMISTRY.

An elementary course in general organic chemistry. The properties of some of the more important compounds are studied in the laboratory and a number of them prepared.

Prerequisite—Chemistry 1, 2.

Texts:

Perkin and Kipping, *Organic Chemistry* (W. R. Chambers).

Adams and Johnson, *Laboratory Experiments in Organic Chemistry* (Macmillan Co.).

Professor McRae.

CHEMISTRY 13. QUANTITATIVE ANALYSIS—Honours Course.

The class-room work is of a more advanced nature than that of Pass course 3, and the laboratory determinations cover a wider range of practice and technique.

Text:

Hall, *Textbook of Quantitative Analysis* (Wiley).

NOTE.—For intra-mural honours students this is a whole course. For extra-mural students at Summer School it is divided into half courses, offered in successive years, and may be taken by either pass or honours students.

Professor Frost.

CHEMISTRY 14. PHYSICAL CHEMISTRY.

The Principles of Physical Chemistry, and their application to the study of chemical reactions and equilibria. Special attention is given to problems of industrial importance. The laboratory work is designed to acquaint the student with the most important physical chemical measurements and to train him in habits of accuracy, and in the planning of methods for research.

Prerequisite—Chemistry 1, 2, 12, 3 or 13, or 3 or 13 and 14 in the same year.

Text:

Millard, *Physical Chemistry for Colleges*.

Professor Frost.

CHEMISTRY 16. PHYSIOLOGICAL CHEMISTRY.

The course includes a detailed study of the properties of the carbohydrates, lipoids and proteins and of the chemical processes involved in respiration, secretion, digestion, absorption, metabolism and excretion and the chemistry of the tissues. The composition of foods and the elements of the science of nutrition are also discussed.

Prerequisite—Chemistry 1, 2, 12, and 3 or 13 or their equivalent.

Texts:

Bodansky, *Introduction to Physiological Chemistry* (John Wiley and Sons).

Hawk and Bergeim, *Practical Physiological Chemistry* (Blakiston).

Professor Logan.

CHEMISTRY 17. INDUSTRIAL CHEMISTRY.—*Lectures and Laboratory.*

In the lectures the following topics, illustrated by specimens, lantern slides, motion pictures, and visits to plants will be discussed: Industrial applications of air and water, natural gases, petroleum products, producer gas, coal gas, water gas, by-product coke, sulphur, sulphuric acid, sulphite, pulp and paper, hydrochloric acid, nitric acid, and ammonia, nitrates natural and synthetic, soda, fertilizers, mortars and cements.

In the laboratory typical industrial processes such as crystallization, precipitation, filtration, distillation and rectification, incomplete reactions, gas analysis and industrial flow sheets will be carried out and interpreted.

Prerequisite—Chemistry 1, 2, 12, 3 or 13 and Physics 1.

Texts:

Rogers, *Manual of Industrial Chemistry* (Van Nostrand).

Atack, *Chemist's Year Book*, (Westman Press) or Olsen,

Van Nostrand's Annual (Van Nostrand).

Professor Neish.

CHEMISTRY 22. ADVANCED ORGANIC CHEMISTRY.

Advanced systematic organic chemistry, including lectures on special topics such as terpenes, alkaloids, stereoisomerism and carbohydrates. The laboratory work includes both practice in organic qualitative and quantitative analysis, and practice in the preparation of a considerable number of substances illustrating the general methods and reactions of Organic Chemistry.

Prerequisite—Chemistry 1, 2, 12, 13, 14, or Chemistry 22, and 14 may be taken in the same year.

Texts:

Bernthsen-Sudborough, *Organic Chemistry* (Blackie & Sons).
Cohen, *Practical Organic Chemistry* (Macmillan Co.).

Books of Reference:

Cohen, *Advanced Organic Chemistry* (Arnold).
Heinrich-Johnson, *Theories of Organic Chemistry* (Wiley & Sons).

Professor McRae.

CHEMISTRY 24. ADVANCED PHYSICAL CHEMISTRY.

This course is designed to give the student an intimate working knowledge of the fundamental principles of Physical Chemistry, and a measure of command in the use of these principles in the solution of chemical problems. A full discussion of thermodynamics is given, including the numerical calculation of free energy and entropy, and a brief treatment of the Nernst Heat Theorem.

Prerequisite—Chemistry 1, 2, 12, 13, 14, and a knowledge of elementary calculus.

Professor Frost.

CHEMISTRY 25. PHYSICAL CHEMISTRY, ELECTRO-CHEMISTRY.

This course is designed to acquaint the student with the application of electricity to aqueous solutions considering such quantities as the mechanism of electrolysis, transport numbers and ionic migration, solvation of ions, conductance of solutions, modern dissociation theory, reversible cells with and without diffusion, hydrogen electrode, polarization, overvoltage, anodic and cathodic reactions. Some industrial applications such as storage batteries, electrolysis of fused salts, electroplating are discussed. The laboratory work consists in the determination of the quantities discussed in the lectures, electrometric titrations, and the production, electrolytically, of such compounds as ammonium persulphate and white lead.

Prerequisite—Chemistry 1, 2, 12, 13, 14.

Texts:

Glasstone, S., *The Electrochemistry of Solutions* (Methuen and Co. Ltd.).

Findlay, *Practical Physical Chemistry* (Longmans, Green and Co.).

Reference:

Thomson, *Theoretical and Applied Electrochemistry* (Macmillan Co.).

Blum and Hogaboom, *Principles of Electroplating and Electroforming* (McGraw-Hill).

Kolthoff and Furman, *Potentiometric Titrations* (John Wiley).

Allmand, *Applied Electrochemistry* (Arnold).

Professor Dorrance.

CHEMISTRY 26a. COLLOID CHEMISTRY.

An introductory course of three hours per week for the first term. The lectures will deal with the general properties of colloids, surface phenomena, adsorption, special stress being laid upon the practical applications of Colloid Chemistry. The laboratory work is illustrative of the topics dealt with in lectures and includes the preparation of colloids by different methods and a study of their electrical properties, coagulation, surface tension, viscosity, adsorption, gels, etc.

Prerequisite—Physics 1 and Chemistry 1, 2, 12, 3, or 13, and 14; or Chemistry 26a and 12, 3 or 13, and 14 may be taken in the same year.

Texts:

Holmes Lab., *Manual of Colloid Chemistry* (Wiley and Sons).

Hatschek, *Introduction to Physics and Chemistry of Colloids*. 5th edition (Blakistons Sons and Co.).

Reference Texts:

Alexander, *Colloid Chemistry*, Vol. I. (Chem. Catalogue Co.).

Svedborg, *Colloid Chemistry* (Chem. Catalogue Co.).

Bancroft, *Applied Colloid Chemistry* (McGraw-Hill Co.).

Weiser, *Hydrous Oxides* (McGraw-Hill Co.).

Professor Munro.

CHEMISTRY 31. GENERAL AND INORGANIC CHEMISTRY—*Research Training*.

For graduate students electing thesis work in Inorganic Chemistry.

Professors Neish, Frost and Munro.

CHEMISTRY 32. ORGANIC CHEMISTRY—*Research Training.*

For graduate students electing thesis work in Organic Chemistry.
Professor McRae.

CHEMISTRY 33. QUANTITATIVE ANALYSIS—*Research Training.*

For graduate students electing thesis work in Quantitative Analysis.
Professor Frost.

CHEMISTRY 34. PHYSICAL CHEMISTRY—*Research Training.*

For graduate students electing thesis work in Physical Chemistry.
Professors Frost and Dorrance.

CHEMISTRY 36. PHYSIOLOGICAL CHEMISTRY—*Research Training.*

For graduate students electing thesis work in Physiological Chemistry.
Professor Logan.

CHEMISTRY 37. INDUSTRIAL CHEMISTRY—*Research Training.*

For graduate students electing thesis work in Industrial Chemistry.
Professor Neish.

CHEMISTRY 44. GRADUATE COURSE.

A graduate course of about fifty lectures dealing with special topics in advanced Physical Chemistry. For the session 1932-33 the following will be considered. The Third Law of Thermodynamics; the Kinetice of Gas Reactions; Gas Reactions at Surfaces and Catalysis.

Professor Frost.

NOTE.—Advanced General Chemistry numbered Chemistry 101b in the calendar has been changed to Chemistry 11b; similarly Chemistry 106a (Colloid Chemistry) has been changed to Chemistry 26a.

BIOLOGY

COURSES MAINLY MORPHOLOGICAL

BIOLOGY 11. PLANT ANATOMY.

The study of the anatomical structure of plants. The preparation of permanent microscopic mounts.

Prerequisite—Biology 1.

Textbook:

Eames and McDaniels, *Plant Anatomy* (McGraw-Hill).

Professor MacClement.

BIOLOGY 12a. TAXONOMY OF PLANTS.

The principles of classification applied to Ferns, Fern Allies, and Flowering Plants.

Prerequisites—Biology 1 and a collection of at least 100 plants preserved by the student.

Textbooks:

Swingle, *Systematic Botany* (McGraw-Hill).

Gray, *New Manual of Botany* (American Book Co.).

Professor MacClement.

BIOLOGY 13b. MORPHOLOGY OF FUNGI.

The development, structure and reproduction of the parasitic and saprophytic cryptogams.

Prerequisites—Biology 1, 11.

Textbooks:

Harshburger, *Mycology and Plant Pathology* (Blakiston).

Professor MacClement.

BIOLOGY 14b. PLANT MORPHOLOGY.

The structure, life histories and evolution of the Algae, Bryophytes, Pteridophytes and Gymnosperms.

Textbook:

Coulter, *Textbook of Botany*, Vol. I (American Book Co.).

Professor Earl.

BIOLOGY 16. ANIMAL ANATOMY

Dissection of the cat.

Methods of animal histology.

Study of slides of typical invertebrates.

Prerequisite—Biology 2.

Textbooks:

Reighard and Jennings, *Anatomy of the Cat* (Holt).

Jordan and Ferguson, *A Textbook of Histology* (Appleton).

Mr. Krotkov.

BIOLOGY 17. CANADIAN ZOOLOGY.

The classification, distribution, life histories, habits and economic importance of the commoner and more important Canadian animals. Field study of animals and their environment and the study of museum specimens representative of each group.

Prerequisite—Biology 2.

Dr. J. Stanley.

BIOLOGY 18. EMBRYOLOGY.

The Embryology of the pig and chick.

Prerequisites—Biology 2, 16, 26.

Dr. H. G. Ettinger.

COURSES IN PHYSIOLOGY

BIOLOGY 21. PLANT PHYSIOLOGY.

A series of experimental studies of the chemical and physical activities of plants, with class discussions.

Prerequisites—Biology 1, Chemistry 1, after 1932-33, Chemistry 12.

Textbook:

Miller, *Plant Physiology* (McGraw-Hill).

Mr. Krotkov.

BIOLOGY 23. ANIMAL PHYSIOLOGY.

Study of the general principles of Physiology, and the physiological investigation of blood, circulation, respiration, muscle, and

nervous system. The physiology of digestion, metabolism, excretions, and internal secretions.

Prerequisites—Biology 2 and 16.

Dr. G. S. Melvin.

COURSES IN ECOLOGY

BIOLOGY 31a. PHYSIOGRAPHIC AND GEOGRAPHIC PLANT ECOLOGY.

A study of the origin and development of plant associations in relation to environment. The relations of plants to latitude, altitude, climate, and other distributive factors. Lectures and field work, the latter especially at week-ends.

Textbook:

Weaver and Clements, *Plant Ecology* (McGraw-Hill).

Prerequisites—Biology 1, 11.

Professor Earl.

BIOLOGY 36. ANIMAL ECOLOGY.

The physical and biological factors of the environment, succession, convergence, and associations. Practical applications of ecology.

Textbooks:

Needham and Lloyd, *Life of Inland Waters* (Comstocks).

Chapman, *Animal Ecology* (McGraw-Hill).

Dr. J. Stanley.

BIOLOGY 37. ECONOMIC ZOOLOGY.

Marine and fresh-water biology with special reference to the fisheries.

Prerequisites—Biology 2, 17, 36.

Dr. J. Stanley.

COURSES IN GENETICS

BIOLOGY 45. EVOLUTION AND GENETICS.

A consideration of data and concepts of organic evolution; the principles of genetics; exercises on variation and heredity in plants and animals.

Prerequisites—Biology 1 and 2.

Textbook:

Babcock and Clausen, *Genetics in Relation to Agriculture* (McGraw-Hill).

Professor Earl.

GRADUATE COURSES

These courses will be given only when feasible and when suitably trained students apply.

BIOLOGY 110. DENDROLOGY.

A study of tree growth, structure and reproduction. The factors affecting the distribution of hardwood and softwood trees. Methods of harvesting and reproducing the timber crop. Identification of Canadian timber trees. The qualities of the various economic woods of Canada. The chief insect and fungal forest pests.

Prerequisites—Biology 1, 2, 11, 17 and 21.

Professor MacClement.

BIOLOGY 113. ECONOMIC FUNGI.

Class discussions and laboratory studies of important plant diseases and the fungi producing them.

Prerequisites—Biology 1, 11, 13a, Chemistry 1.

Textbooks:

Owens, *Plant Pathology*.

Whetzel, *Laboratory Outlines of Plant Pathology*.

Professor MacClement.

BIOLOGY 115. CYTOLOGY.

The structure and life-history of the cell.

Laboratory work, reading and conferences.

Prerequisites—Biology 1, 2, 11 and 16.

Professor Earl.

BIOLOGY 116. ADVANCED ECONOMIC ZOOLOGY.

The application of biology to the fisheries, game, fur-bearing animals, national parks, etc.

Prerequisites—Biology 1, 2, 17, 36, 37.

Dr. J. Stanley.

BIOLOGY 117. ECONOMIC ENTOMOLOGY.

A study of the principal insect pests of the farm and forest, and methods of control.

Prerequisites—Biology 1, 2, 17, 36.

Dr. J. Stanley.

BACTERIOLOGY

COURSES OF INSTRUCTION

BACTERIOLOGY 10.

An introductory course in general bacteriology, structure, physiology, fermentation and decomposition; a systematic study of the bacteria with particular reference to the pathogenic forms; infection and immunity.

Prerequisites—Biology 1, 2 and 13 or 21 and Chemistry 1 and 12.

BACTERIOLOGY 13a. THE MICROBIOLOGY OF FOODS AND WATER SUPPLIES.

BACTERIOLOGY 20. RESEARCH IN BACTERIOLOGY.

GEOLOGY

GEOLOGY 10b. ELEMENTARY PETROGRAPHY.

This course is essentially on igneous Geology and Petrography, and will consist of lectures and discussion on the geological occurrences of igneous rocks, the processes of crystallization from magmas, the forms assumed, the textures, and the metamorphic changes that are produced in the intrusive mass itself, and on its surroundings. The lectures will be illustrated by projections of thin sections of rocks, and will be supplemented by laboratory work on hand specimens and rock slices. Students taking this course must have taken Mineralogy 10a.

Text-books:

Luquer, *Minerals in Rock Sections*.

Pirsson, *Rocks and Rock Minerals*.

GEOLOGY 11a. STRUCTURAL GEOLOGY.

Inherent and imposed structures in sedimentary, igneous, and metamorphic rocks, with particular attention to sedimentation, diastrophism, and volcanism. Illustrations mainly from Canadian occurrences.

Reference Books:

Pirsson and Schuchert, *Text Book of Geology*, Part I.

Willis, *Geologic Structures*.

Leith, *Structural Geology*.

Busk, *Earth Flexures*.

Twenhofel, *Treatise on Sedimentation*.

Collet, *The Structure of the Alps*.

Professor Rose.

GEOLOGY 11b. PHYSIOGRAPHY.

Topography using structure as a basis of interpretation. Physiographic cycles, under normal, arid, glacial, karst and marine conditions. The interpretation of topographic and geologic maps. Illustrations from Canadian occurrences where possible.

Prerequisite—Geology 11a.

Reference Books:

Salisbury, *Physiography*.

Cotton, *Geomorphology of New Zealand*, Part 1.

Dake and Brown, *Interpretation of Topographic and Geologic Maps*.

Young, *Geology of Canada*.

Professor Rose.

GEOLOGY 13. HISTORICAL GEOLOGY.

Continental evolution and geologic life development with special reference to North America.

Text-book:

Schuchert, *Outlines of Historical Geology*, 2nd Ed. (John Wiley and Sons).

Professor Rose.

GEOLOGY 14. ADVANCED PETROGRAPHY.

A course of lectures will be given on the microscopic characters and classification of igneous rocks, and on their origin, geological form, and general field characters. The lecture work will be supplemented by assigned special reading and by laboratory work with both hand specimens and microscopic slides. Special attention will also be paid to the metamorphic rocks.

Professor Baker.

GEOLOGY 15. ECONOMIC GEOLOGY.

The work in this class is an illustration of the principles of ore deposition. For this purpose type deposits in the largest producing districts throughout the world are studied in some detail. It is of course impossible to treat of all products, but the basis of classification and the fundamental principles underlying economic deposits are studied with particular reference to iron, copper, nickel, zinc, lead, silver, gold, aluminum, peat, coal, gas, oil, salt, abrasive and refractory materials. A few lectures on building stone, and on clays and the manufacture of clay products will be given.

Within one hundred miles of Kingston a greater variety of economic minerals and ores is mined than in any similar area in Canada, and possibly in the world. Through the kindness of the managers, advanced students may visit the various mines and thus gain valuable information regarding economic Geology.

Professor Baker.

GEOLOGY 17. FIELD AND LABORATORY GEOLOGY.

GEOLOGY 18. SYSTEMATIC PALEONTOLOGY.

GEOLOGY 19. STRATIGRAPHY.

MINERALOGY

MINERALOGY 10a. ELEMENTS OF OPTICAL MINERALOGY.

(same course as Geology 10a.)

Text:

A. N. Winchell, *Elements of Optical Mineralogy*. 3rd Ed. (John Wiley and Sons, 1928).

Professor Hawley.

MINERALOGY 10b. OPTICAL AND PHYSICAL MINERALOGY AND CRYSTALLOGRAPHY.

An advanced course in the character of crystals, crystal measurements and the optic properties of minerals.

Prerequisites—Mineralogy 1, Physics 1.

Professor Hawley.

MINERALOGY 11. DESCRIPTIVE AND DETERMINATIVE MINERALOGY.

A course describing the properties, occurrence and uses of all the common or important minerals.

Prerequisites—Mineralogy 1 and 10a; students of an Honour Course may take 10a and 11 at the same time.

Professor Hawley and Assistants.

MINERALOGY 12. ORE MINERALS AND MINERAGRAPHY.

A course covering the ore minerals, their properties, origin and distribution. In the laboratory an elementary course in the microscopic study of opaque minerals is given. This course will be offered in alternate years. It will alternate with Mineralogy 13. Not given in session 1932-33.

Prerequisites as for Mineralogy 11.

Professor Hawley.

MINERALOGY 13. MINERAL TECHNOLOGY.

A study of non-metallic minerals used for abrasives, refractory materials, fertilizers, building stones, gem stones, etc., their occurrence and utilization. This course will be given in alternate years.

Offered in session 1932-33.

Prerequisites as for Mineralogy 11.

Professor Hawley.

GRADUATE COURSES

MINERALOGY 115. ADVANCED OPTICAL MINERALOGY.

A course on the optical properties of minerals with laboratory work. Offered in alternate years with Mineralogy 16. Given in session 1932-33.

Text:

- A. N. Winchell: *Elements of Optical Mineralogy*, Part II, (J. Wiley and Sons, 1927).

Professor Hawley.

